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**U.S. Army
Environmental
Center**

**FORT DEVENS
SITE INVESTIGATION
GROUPS 3, 5, AND 6**

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**REVISED
FINAL SITE INVESTIGATION REPORT
DATA ITEM A009**

**VOLUME II of II
APPENDICES**

CONTRACT DAAA15-91-D-0008

**U.S. ARMY ENVIRONMENTAL CENTER
ABERDEEN PROVING GROUND, MARYLAND**

20070502756

JANUARY 1996

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APPENDIX A
AQUIFER TEST DATA/CALCULATIONS

AQUIFER TEST DATA/CALCULATIONS

Aquifer test data and calculations are included in this appendix for the following wells drilled as part of the site investigations at the Groups 3, 5, and 6 Study Areas:

Initial site investigations

G3M-92-01X
G3M-92-02X
G3M-92-03X
G3M-92-04X
G3M-92-05X
G3M-92-06X
G3M-92-07X
G5M-92-01X
G5M-92-02X
G5M-92-03B
G6M-92-01X
G6M-92-02X
G6M-92-03X
G6M-92-04X
G6M-92-05X
G6M-92-06X
G6M-92-07X
G6M-92-08X
G6M-92-09X
G6M-92-10X
G6M-92-11X

Supplemental site investigations

G3M-93-08X
G3M-93-09X
G3M-93-10X
G3M-93-11X
G6M-93-12X
G6M-93-13X
G6M-93-14X

Phase III site investigation

G6M-94-15A
G6M-94-16X
G6M-94-17A
G6M-94-18X
G6M-95-19X
G6M-95-12X

WELL G3M-92-01X
WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 7.2 FT, BORING DIAMETER = 0.833 FT

TEST 1 MINUTES	FEET	TEST 2 MINUTES	FEET
0	-0.009	0	0.012
0.0033	0.075	0.0033	0.009
0.0066	1.48	0.0066	1.006
0.01	2.748	0.01	1.9
0.0133	0.198	0.0133	1.221
0.0166	0.48	0.0166	0.981
0.02	1.625	0.02	0.842
0.0233	2.209	0.0233	2.108
0.0266	1.912	0.0266	1.897
0.03	1.837	0.03	1.862
0.0333	1.83	0.0333	1.859
0.0366	1.837	0.0366	1.862
0.04	1.84	0.04	1.84
0.0433	1.833	0.0433	1.84
0.0466	1.824	0.0466	1.84
0.05	1.805	0.05	1.821
0.0533	1.799	0.0533	1.814
0.0566	1.796	0.0566	1.802
0.06	1.777	0.06	1.805
0.0633	1.773	0.0633	1.789
0.0666	1.77	0.0666	1.786
0.07	1.758	0.07	1.773
0.0733	1.755	0.0733	1.796
0.0766	1.761	0.0766	1.77
0.08	1.745	0.08	1.761
0.0833	1.732	0.0833	1.755
0.0866	1.726	0.0866	1.755
0.09	1.723	0.09	1.742
0.0933	1.72	0.0933	1.729
0.0966	1.71	0.0966	1.723
0.1	1.688	0.1	1.72
0.1033	1.685	0.1033	1.717
0.1066	1.698	0.1066	1.71
0.11	1.679	0.11	1.691
0.1133	1.669	0.1133	1.698
0.1166	1.663	0.1166	1.688
0.12	1.657	0.12	1.682
0.1233	1.653	0.1233	1.676
0.1266	1.638	0.1266	1.669
0.13	1.638	0.13	1.663
0.1333	1.631	0.1333	1.66
0.1366	1.638	0.1366	1.653
0.14	1.619	0.14	1.644
0.1433	1.606	0.1433	1.641
0.1466	1.603	0.1466	1.635
0.15	1.603	0.15	1.628
0.1533	1.594	0.1533	1.625
0.1566	1.584	0.1566	1.612
0.16	1.581	0.16	1.609
0.1633	1.565	0.1633	1.6
0.1666	1.565	0.1666	1.597
0.17	1.559	0.17	1.594
0.1733	1.552	0.1733	1.584
0.1766	1.549	0.1766	1.581
0.18	1.54	0.18	1.571
0.1833	1.534	0.1833	1.562
0.1866	1.53	0.1866	1.562
0.19	1.524	0.19	1.556
0.1933	1.515	0.1933	1.552
0.1966	1.508	0.1966	1.543
0.2	1.505	0.2	1.543
0.2033	1.499	0.2033	1.534
0.2066	1.492	0.2066	1.527
0.21	1.486	0.21	1.521
0.2133	1.48	0.2133	1.518
0.2166	1.474	0.2166	1.508
0.22	1.467	0.22	1.499
0.2233	1.461	0.2233	1.499
0.2266	1.455	0.2266	1.489
0.23	1.451	0.23	1.489
0.2333	1.445	0.2333	1.486
0.2366	1.439	0.2366	1.477
0.24	1.433	0.24	1.474
0.2433	1.423	0.2433	1.461
0.2466	1.42	0.2466	1.461
0.25	1.414	0.25	1.451
0.2533	1.41	0.2533	1.451
0.2566	1.401	0.2566	1.445
0.26	1.398	0.26	1.439
0.2633	1.395	0.2633	1.433
0.2666	1.388	0.2666	1.429
0.27	1.382	0.27	1.423
0.2733	1.379	0.2733	1.42
0.2766	1.369	0.2766	1.414
0.28	1.366	0.28	1.407
0.2833	1.36	0.2833	1.404
0.2866	1.354	0.2866	1.401
0.29	1.347	0.29	1.391
0.2933	1.344	0.2933	1.391
0.2966	1.338	0.2966	1.379
0.3	1.335	0.3	1.379
0.3033	1.328	0.3033	1.376
0.3066	1.322	0.3066	1.369
0.31	1.316	0.31	1.363
0.3133	1.313	0.3133	1.354
0.3166	1.309	0.3166	1.354
0.32	1.3	0.32	1.347
0.3233	1.297	0.3233	1.347
0.3266	1.294	0.3266	1.338
0.33	1.287	0.33	1.335
0.3333	1.281	0.3333	1.328
0.35	1.259	0.35	1.303
0.3666	1.231	0.3666	1.278
0.3833	1.206	0.3833	1.256
0.4	1.183	0.4	1.234
0.4166	1.161	0.4166	1.212
0.4333	1.139	0.4333	1.193
0.45	1.12	0.45	1.174
0.4666	1.098	0.4666	1.152
0.4833	1.079	0.4833	1.136
0.5	1.063	0.5	1.117
0.5166	1.047	0.5166	1.101
0.5333	1.032	0.5333	1.085
0.55	1.016	0.55	1.07

0.5666	1.003
0.5833	0.987
0.6	0.978
0.6166	0.965
0.6333	0.953
0.65	0.943
0.6666	0.934
0.6833	0.924
0.7	0.915
0.7166	0.909
0.7333	0.899
0.75	0.893
0.7666	0.886
0.7833	0.88
0.8	0.874
0.8166	0.868
0.8333	0.861
0.85	0.855
0.8666	0.852
0.8833	0.845
0.9	0.839
0.9166	0.836
0.9333	0.83
0.95	0.826
0.9666	0.823
0.9833	0.817
1	0.814
1.2	0.763
1.4	0.732
1.6	0.707
1.8	0.688
2	0.669
2.2	0.653
2.4	0.637
2.6	0.624
2.8	0.612
3	0.602
3.2	0.59
3.4	0.58
3.6	0.571
3.8	0.561
4	0.552
4.2	0.542
4.4	0.536
4.6	0.527
4.8	0.52
5	0.511
5.2	0.505
5.4	0.498
5.6	0.489
5.8	0.482
6	0.476
6.2	0.47
6.4	0.464
6.6	0.457
6.8	0.451
7	0.445
7.2	0.441
7.4	0.435
7.6	0.429
7.8	0.422
8	0.419
8.2	0.413
8.4	0.41
8.6	0.404
8.8	0.397
9	0.394
9.2	0.388
9.4	0.385
9.6	0.378
9.8	0.375
10	0.372
11	0.35
12	0.331
13	0.312
14	0.296
15	0.28
16	0.268

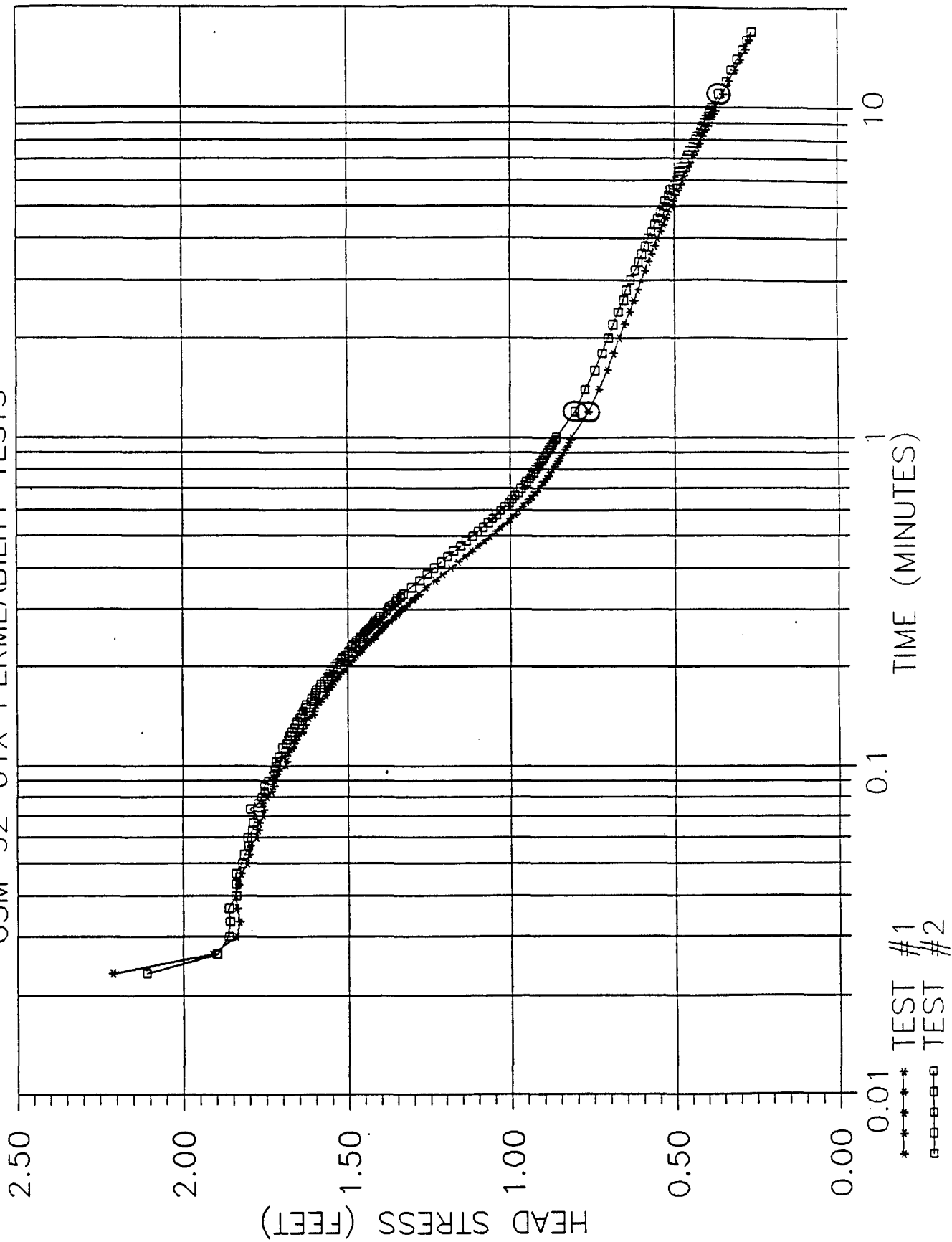
PERMEABILITY TEST RESULTS FOR G3M-02-01X

TEST 1
HVORSLEV:
K= 0.000042 CM/SEC
BOUWER & RICE:
K= 0.00012 CM/SEC

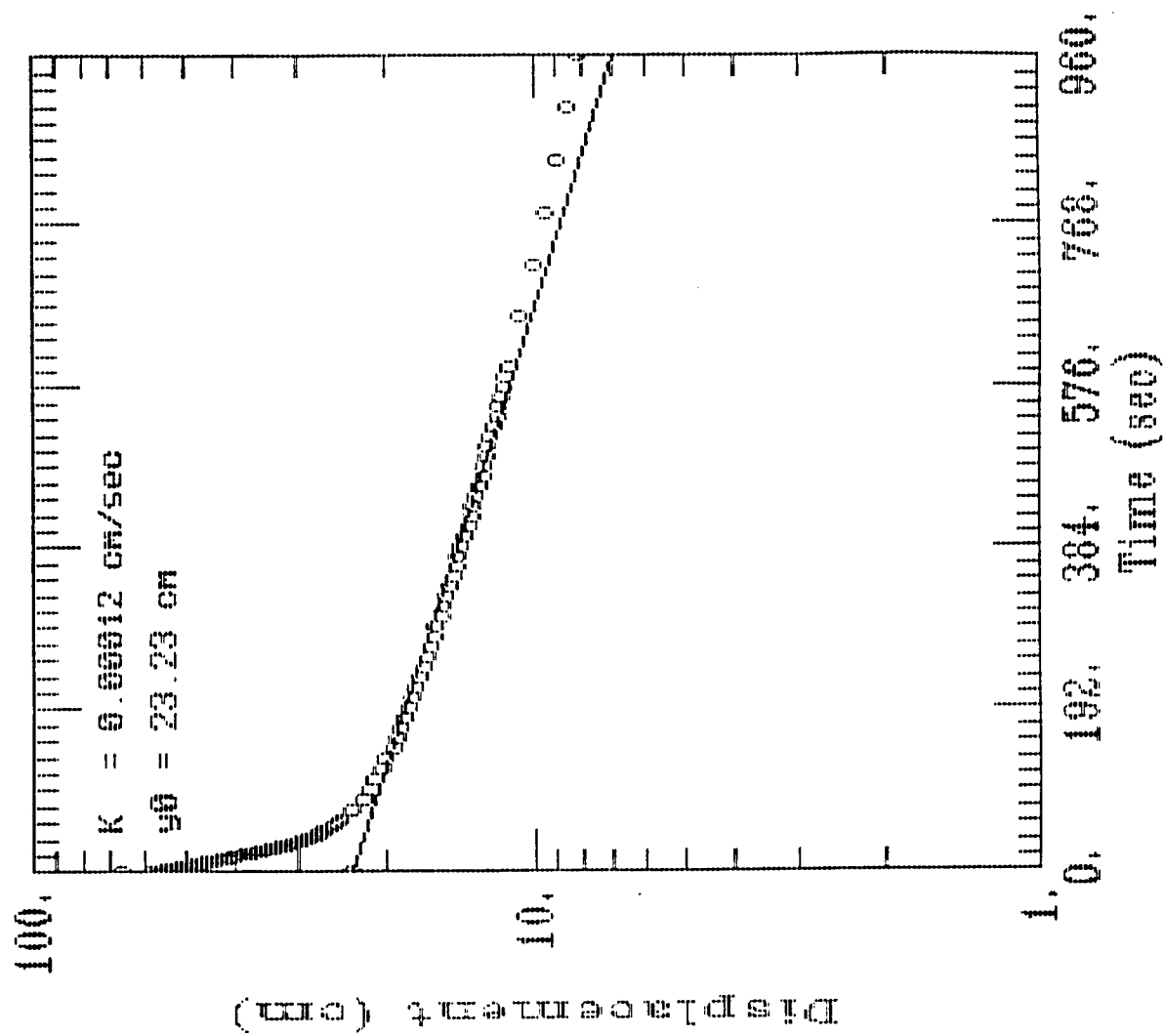
0.5666	1.057
0.5833	1.044
0.6	1.032
0.6166	1.019
0.6333	1.008
0.65	0.997
0.6666	0.987
0.6833	0.978
0.7	0.969
0.7166	0.959
0.7333	0.953
0.75	0.943
0.7666	0.937
0.7833	0.931
0.8	0.924
0.8166	0.918
0.8333	0.912
0.85	0.905
0.8666	0.899
0.8833	0.896
0.9	0.89
0.9166	0.886
0.9333	0.88
0.95	0.874
0.9666	0.871
0.9833	0.864
1	0.861
1.2	0.804
1.4	0.773
1.6	0.744
1.8	0.722
2	0.703
2.2	0.688
2.4	0.672
2.6	0.656
2.8	0.647
3	0.634
3.2	0.621
3.4	0.609
3.6	0.599
3.8	0.59
4	0.58
4.2	0.571
4.4	0.561
4.6	0.552
4.8	0.546
5	0.538
5.2	0.53
5.4	0.52
5.6	0.514
5.8	0.505
6	0.498
6.2	0.492
6.4	0.486
6.6	0.479
6.8	0.473
7	0.467
7.2	0.46
7.4	0.454
7.6	0.448
7.8	0.441
8	0.435
8.2	0.432
8.4	0.426
8.6	0.419
8.8	0.416
9	0.41
9.2	0.404
9.4	0.4
9.6	0.394
9.8	0.391
10	0.385
11	0.363
12	0.34
13	0.325
14	0.308
15	0.29
16	0.274
17	0.261

TEST 2
HVORSLEV:
K= 0.000043 CM/SEC
BOUWER & RICE:
K= 0.00012 CM/SEC

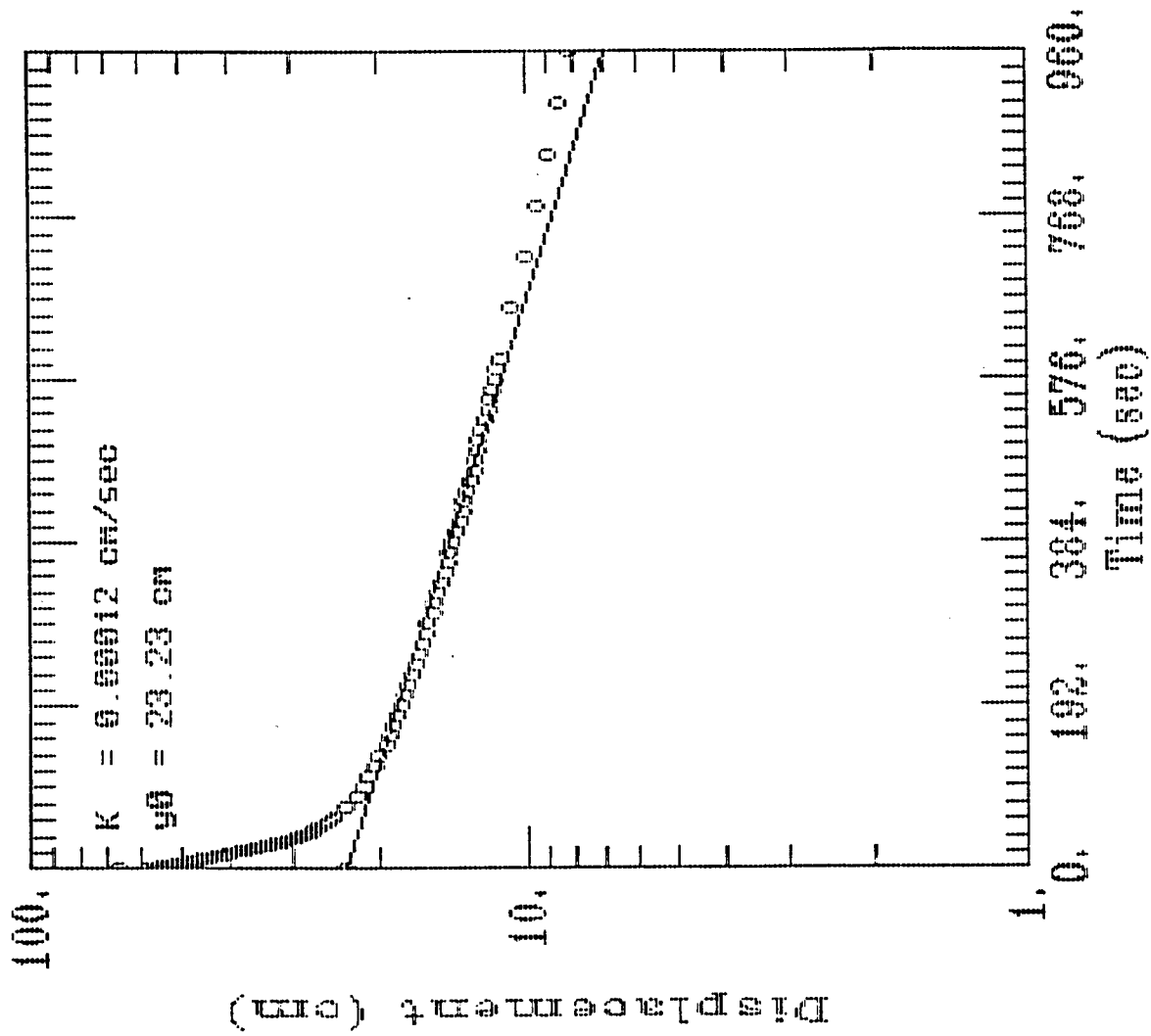
G3M-92-01X PERMEABILITY TESTS



GSM-92-01X PERMEABILITY TEST #1



G9M-92-01X PERMEABILITY TEST #1



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	63M-92.01X 4"	R. RUSTAD
DATE OF TEST	10.08.92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE 10002 / 1K601350	
TEST #	SEL 1 / 2002	
DATA COLLECTION RATE	LOW 1	
TRANSDUCER		
SERIAL #	2045 DE	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	#1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	25.60 (PVC)	
WELL DEPTH (FT./TOC)	32.80 (PVC)	
XD DEPTH (FT./TOC)	31.80 (PVC)	
INITIAL XD REFERENCE	0.60	
SLUG DEPTH (FT./TOC)	29.80 (PVC)	
TIME OF SLUG PLACEMENT	0910	
TIME OF WL EQUILIBRATION	—	
NEW XD REFERENCE	0.20	
START TIME OF TEST	0910	
END TIME OF TEST	0927	
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	63M.92.01X 4"	R. RUSTAD
DATE OF TEST	10.08.92	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE1000C / 1K00.732	
TEST #	SEL 0 / 1002	
DATA COLLECTION RATE	6001	
TRANSDUCER		
SERIAL #	204552	
PSIG	10	
SCALE FACTOR	10.00 (REV) 9.983	
OFFSET	-0.035	
INPUT CHANNEL	#1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	25.68 (PVC)	
WELL DEPTH (FT./TOC)	32.80 (PVC)	
XD DEPTH (FT./TOC)	31.80 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	29.80 (PVC)	
TIME OF SLUG PLACEMENT	0804	
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE	0.28	
START TIME OF TEST	0804	
END TIME OF TEST	0819	
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

WELL G3M-02-02X

WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 6.7 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	-0.015
0.0033	0.23
0.0066	1.111
0.01	2.307
0.0133	0.912
0.0166	0.77
0.02	1.379
0.0233	1.47
0.0266	1.404
0.03	1.308
0.0333	1.224
0.0366	1.152
0.04	1.076
0.0433	1.008
0.0466	0.937
0.05	0.86
0.0533	0.82
0.0566	0.763
0.06	0.716
0.0633	0.669
0.0666	0.624
0.07	0.58
0.0733	0.539
0.0766	0.517
0.08	0.47
0.0833	0.435
0.0866	0.404
0.09	0.368
0.0933	0.353
0.0966	0.325
0.1	0.303
0.1033	0.277
0.1066	0.261
0.11	0.243
0.1133	0.224
0.1166	0.208
0.12	0.195
0.1233	0.179
0.1266	0.17
0.13	0.157
0.1333	0.145
0.1366	0.135
0.14	0.126
0.1433	0.116
0.1466	0.11
0.15	0.104
0.1533	0.097
0.1566	0.088
0.16	0.085
0.1633	0.078
0.1666	0.075
0.17	0.069
0.1733	0.066
0.1766	0.059
0.18	0.056
0.1833	0.05
0.1866	0.05
0.19	0.044
0.1933	0.044
0.1966	0.041
0.2	0.037
0.2033	0.037
0.2066	0.034
0.21	0.031
0.2133	0.031
0.2166	0.028
0.22	0.028
0.2233	0.025
0.2266	0.025
0.23	0.022
0.2333	0.022
0.2366	0.018
0.24	0.018
0.2433	0.018
0.2466	0.018
0.25	0.015
0.2533	0.015
0.2566	0.015
0.26	0.015
0.2633	0.012
0.2666	0.012
0.27	0.012
0.2733	0.009
0.2766	0.009
0.28	0.009
0.2833	0.009
0.2866	0.009
0.29	0.009
0.2933	0.009
0.2966	0.009
0.3	0.009
0.3033	0.006
0.3066	0.006
0.31	0.006
0.3133	0.006
0.3166	0.006
0.32	0.006
0.3233	0.003
0.3266	0.003
0.33	0.003
0.3333	0.003
0.35	0.003
0.3666	0.003
0.3833	0
0.4	0
0.4166	0
0.4333	0
0.45	0
0.4666	-0.003
0.4833	0
0.5	-0.003
0.5166	-0.003
0.5333	-0.003
0.55	-0.003

TEST 2
MINUTES

FEET

0	0.015
0.0033	0.293
0.0066	1.354
0.01	1.609
0.0133	1.814
0.0166	0.486
0.02	1.272
0.0233	1.565
0.0266	1.426
0.03	1.344
0.0333	1.246
0.0366	1.171
0.04	1.098
0.0433	1.029
0.0466	0.965
0.05	0.905
0.0533	0.842
0.0566	0.801
0.06	0.741
0.0633	0.691
0.0666	0.643
0.07	0.596
0.0733	0.561
0.0766	0.523
0.08	0.489
0.0833	0.454
0.0866	0.426
0.09	0.394
0.0933	0.369
0.0966	0.344
0.1	0.321
0.1033	0.299
0.1066	0.26
0.11	0.262
0.1133	0.243
0.1166	0.227
0.12	0.214
0.1233	0.198
0.1266	0.186
0.13	0.176
0.1333	0.164
0.1366	0.154
0.14	0.146
0.1433	0.135
0.1466	0.129
0.15	0.123
0.1533	0.113
0.1566	0.107
0.16	0.1
0.1633	0.097
0.1666	0.091
0.17	0.085
0.1733	0.082
0.1766	0.076
0.18	0.072
0.1833	0.069
0.1866	0.066
0.19	0.063
0.1933	0.059
0.1966	0.056
0.2	0.056
0.2033	0.053
0.2066	0.05
0.21	0.047
0.2133	0.047
0.2166	0.044
0.22	0.044
0.2233	0.041
0.2266	0.041
0.23	0.041
0.2333	0.037
0.2366	0.037
0.24	0.034
0.2433	0.034
0.2466	0.034
0.25	0.031
0.2533	0.031
0.2566	0.031
0.26	0.028
0.2633	0.028
0.2666	0.028
0.27	0.028
0.2733	0.025
0.2766	0.025
0.28	0.025
0.2833	0.025
0.2866	0.025
0.29	0.025
0.2933	0.022
0.2966	0.022
0.3	0.022
0.3033	0.022
0.3066	0.022
0.31	0.022
0.3133	0.022
0.3166	0.022
0.32	0.022
0.3233	0.018
0.3266	0.018
0.33	0.018
0.3333	0.018
0.35	0.018
0.3666	0.018
0.3833	0.015
0.4	0.015
0.4166	0.015
0.4333	0.015
0.45	0.012
0.4666	0.012
0.4833	0.012
0.5	0.012
0.5166	0.012
0.5333	0.012
0.55	0.012

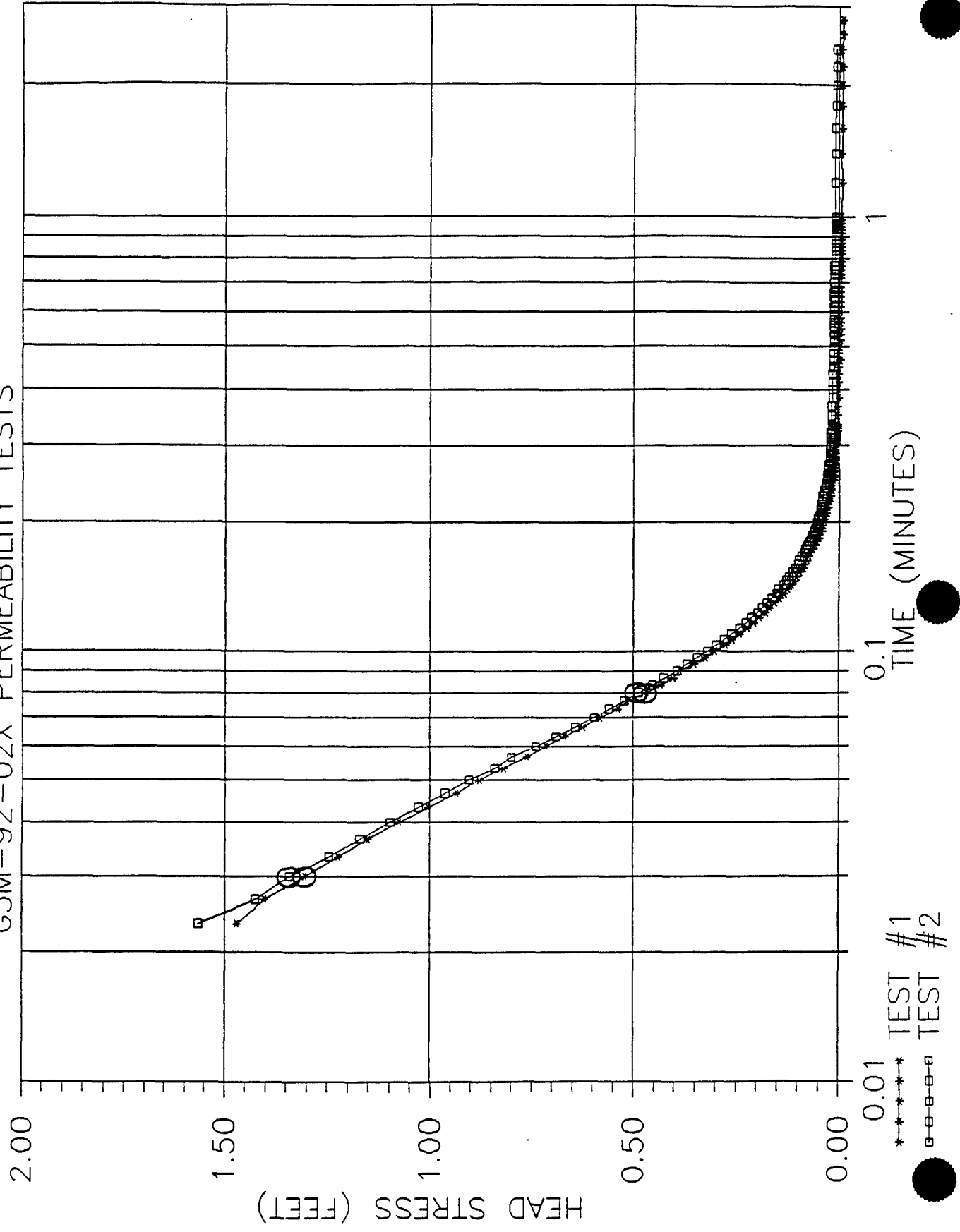
0.5666	-0.003
0.5833	-0.003
0.6	-0.003
0.6166	-0.003
0.6333	-0.003
0.65	-0.003
0.6666	-0.003
0.6833	-0.003
0.7	-0.003
0.7166	-0.003
0.7333	-0.003
0.75	-0.003
0.7666	-0.006
0.7833	-0.006
0.8	-0.006
0.8166	-0.006
0.8333	-0.006
0.85	-0.006
0.8666	-0.006
0.8833	-0.006
0.9	-0.006
0.9166	-0.006
0.9333	-0.006
0.95	-0.006
0.9666	-0.006
0.9833	-0.006
1	-0.006
1.2	-0.009
1.4	-0.006
1.6	-0.006
1.8	-0.006
2	-0.006
2.2	-0.006
2.4	-0.006
2.6	-0.006
2.8	-0.009

PERMEABILITY TEST RESULTS FOR G3M-92-02X
 TEST 1
 HVORSLEV:
 K= 0.011 CM/SEC
 BOUWER & RICE:
 K= 0.034 CM/SEC

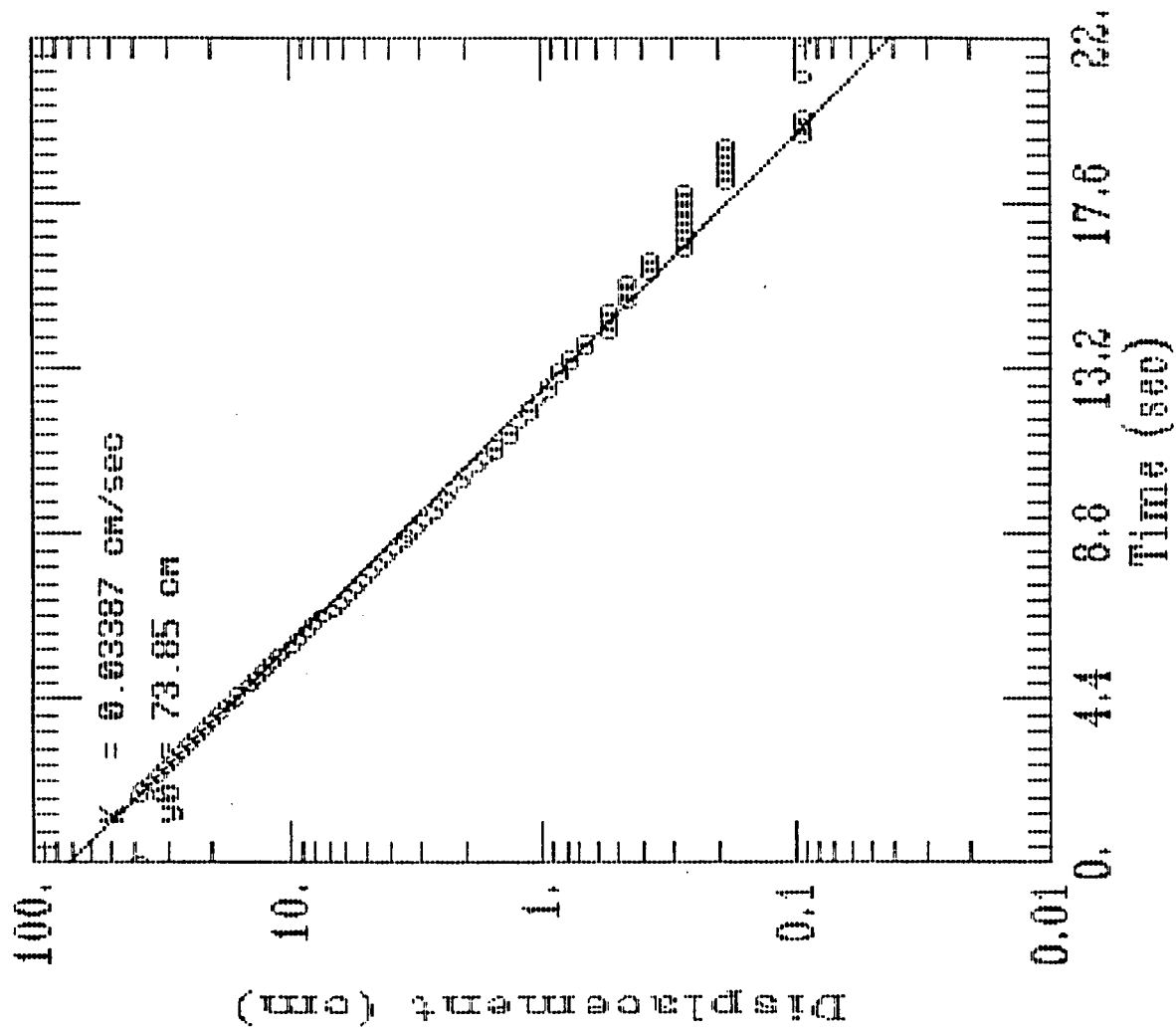
0.5666	0.012
0.5833	0.012
0.6	0.012
0.6166	0.012
0.6333	0.009
0.65	0.012
0.6666	0.012
0.6833	0.009
0.7	0.012
0.7166	0.012
0.7333	0.012
0.75	0.009
0.7666	0.012
0.7833	0.009
0.8	0.009
0.8166	0.009
0.8333	0.009
0.85	0.009
0.8666	0.009
0.8833	0.009
0.9	0.009
0.9166	0.009
0.9333	0.009
0.95	0.009
0.9666	0.009
0.9833	0.009
1	0.009
1.2	0.009
1.4	0.009
1.6	0.009
1.8	0.006
2	0.006
2.2	0.006
2.4	0.006

TEST 2
 HVORSLEV:
 K= 0.011 CM/SEC
 BOUWER & RICE:
 K= 0.033 CM/SEC

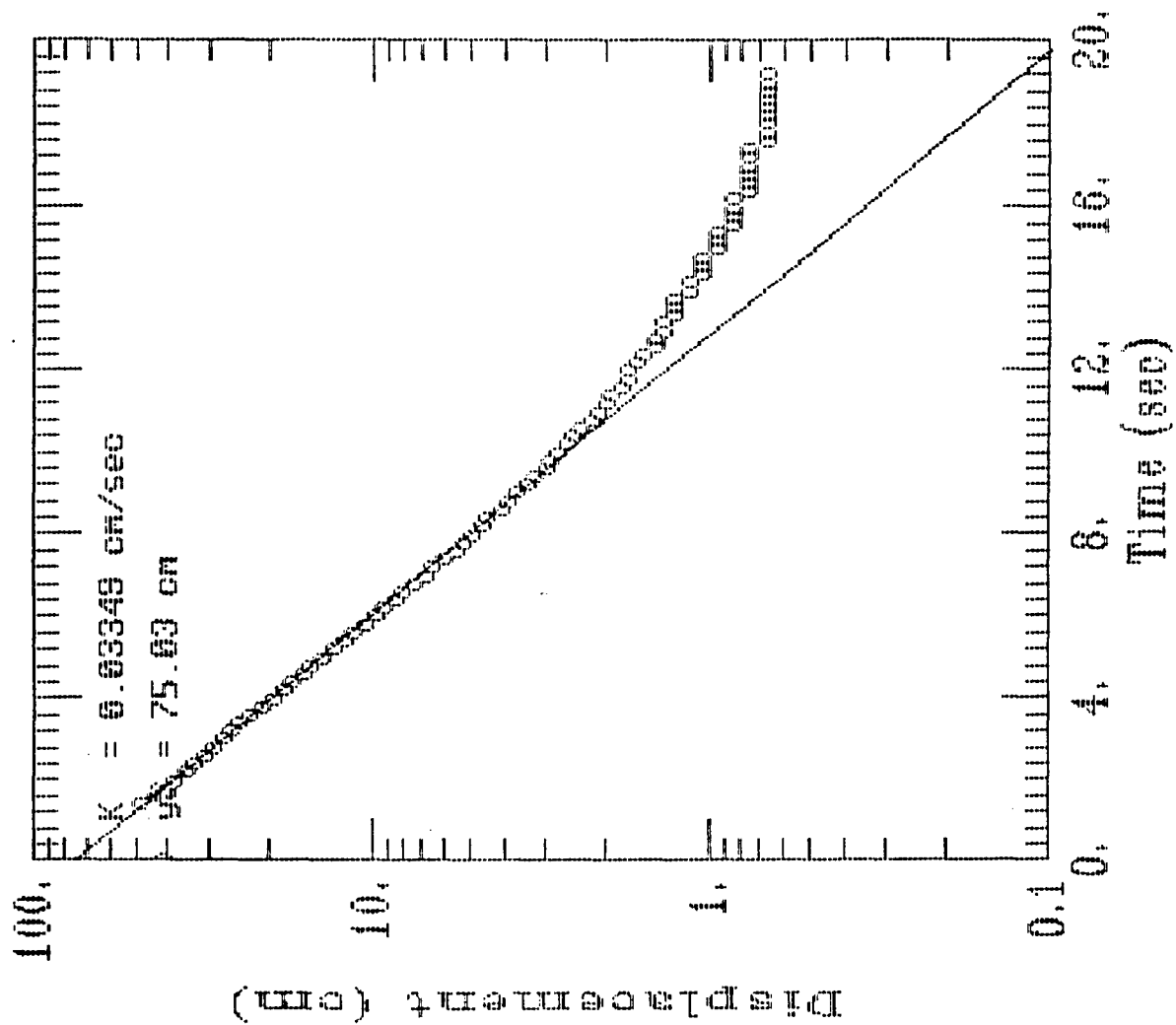
G3M-92-02X PERMEABILITY TESTS



GOM-92-02X PERMEABILITY TEST #1



G3M-92-02X PERMEABILITY TEST #2



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	03M.92.02X 4"	R. RUSTAD
DATE OF TEST	10.02.92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SL1000C / 1K501232	
TEST #	SEL 6 / 1002	
DATA COLLECTION RATE	LOW 1	
TRANSDUCER		
SERIAL #	204601 204501	
PSIG	10	
SCALE FACTOR	10.00 9.983	
OFFSET	-0.034 -0.035	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	26.42 (PVC)	
WELL DEPTH (FT./TOC)	33.08 (PVC)	
XD DEPTH (FT./TOC)	32.08 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	30.08 (PVC)	
TIME OF SLUG PLACEMENT	14.02 1442	
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE	-0.00	
START TIME OF TEST	14.02 1442	
END TIME OF TEST	1450	
NOTES:	* USING NEW TRANSDUCER *	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	63M.92.02x 4"	R. RUSTAD
DATE OF TEST	10.07.92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE 1000C / 1460732	
TEST #	SEL 7 / 2002	
DATA COLLECTION RATE	200 /	
TRANSDUCER		
SERIAL #	204502	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	26.42 (PVC)	
WELL DEPTH (FT./TOC)	33.08 (PVC)	
XD DEPTH (FT./TOC)	32.08 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	30.08 (PVC)	
TIME OF SLUG PLACEMENT	1454	
TIME OF WL EQUILIBRATION	-	
NEW XD REFERENCE	0.00	
START TIME OF TEST	1454	
END TIME OF TEST	1456	
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

WELL G3M-92-03X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 7.4 FT. BORING DIAMETER = 0.633 FT

TEST 1
MINUTES

FEET

0	0
0.0033	0.031
0.0066	0.092
0.01	1.575
0.0133	1.135
0.0166	0.990
0.02	1.144
0.0233	0.373
0.0266	1.186
0.03	1.518
0.0333	1.29
0.0366	1.189
0.04	1.091
0.0433	1.012
0.0466	0.933
0.05	0.86
0.0533	0.793
0.0566	0.73
0.06	0.676
0.0633	0.623
0.0666	0.569
0.07	0.525
0.0733	0.483
0.0766	0.442
0.08	0.411
0.0833	0.376
0.0866	0.344
0.09	0.316
0.0933	0.287
0.0966	0.266
0.1	0.246
0.1033	0.224
0.1066	0.208
0.11	0.189
0.1133	0.177
0.1166	0.161
0.12	0.148
0.1233	0.136
0.1266	0.126
0.13	0.117
0.1333	0.107
0.1366	0.098
0.14	0.091
0.1433	0.085
0.1466	0.079
0.15	0.072
0.1533	0.066
0.1566	0.063
0.16	0.056
0.1633	0.053
0.1666	0.05
0.17	0.047
0.1733	0.044
0.1766	0.041
0.18	0.037
0.1833	0.034
0.1866	0.034
0.19	0.031
0.1933	0.028
0.1966	0.025
0.2	0.025
0.2033	0.025
0.2066	0.022
0.21	0.022
0.2133	0.022
0.2166	0.018
0.22	0.018
0.2233	0.015
0.2266	0.015
0.23	0.015
0.2333	0.012
0.2366	0.012
0.24	0.012
0.2433	0.012
0.2466	0.012
0.25	0.009
0.2533	0.012
0.2566	0.009
0.26	0.009
0.2633	0.009
0.2666	0.009
0.27	0.009
0.2733	0.006
0.2766	0.006
0.28	0.006
0.2833	0.006
0.2866	0.006
0.29	0.006
0.2933	0.006
0.2966	0.006
0.3	0.006
0.3033	0.006
0.3066	0.006
0.31	0.006
0.3133	0.003
0.3166	0.006
0.32	0.006
0.3233	0.006
0.3266	0.006
0.33	0.006
0.3333	0.003
0.35	0.006
0.3666	0.003
0.3833	0.003
0.4	0.003
0.4166	0.003
0.4333	0.003
0.45	0.003
0.4666	0.003
0.4833	0.003
0.5	0.003
0.5166	0.003
0.5333	0.003
0.55	0.003

TEST 2
MINUTES

FEET

0	-0.015
0.0033	0.363
0.0066	1.824
0.01	1.378
0.0133	1.103
0.0166	1.031
0.02	0.126
0.0233	0.759
0.0266	1.567
0.03	1.239
0.0333	1.173
0.0366	1.091
0.04	1.012
0.0433	0.933
0.0466	0.86
0.05	0.793
0.0533	0.73
0.0566	0.673
0.06	0.619
0.0633	0.572
0.0666	0.528
0.07	0.48
0.0733	0.445
0.0766	0.404
0.08	0.373
0.0833	0.344
0.0866	0.316
0.09	0.281
0.0933	0.272
0.0966	0.246
0.1	0.227
0.1033	0.208
0.1066	0.192
0.11	0.183
0.1133	0.167
0.1166	0.154
0.12	0.145
0.1233	0.129
0.1266	0.12
0.13	0.11
0.1333	0.104
0.1366	0.094
0.14	0.088
0.1433	0.082
0.1466	0.079
0.15	0.072
0.1533	0.066
0.1566	0.063
0.16	0.06
0.1633	0.06
0.1666	0.05
0.17	0.047
0.1733	0.047
0.1766	0.047
0.18	0.037
0.1833	0.034
0.1866	0.034
0.19	0.034
0.1933	0.031
0.1966	0.028
0.2	0.031
0.2033	0.028
0.2066	0.028
0.21	0.025
0.2133	0.022
0.2166	0.025
0.22	0.022
0.2233	0.022
0.2266	0.022
0.23	0.018
0.2333	0.018
0.2366	0.018
0.24	0.018
0.2433	0.018
0.2466	0.015
0.25	0.015
0.2533	0.015
0.2566	0.015
0.26	0.012
0.2633	0.015
0.2666	0.015
0.27	0.012
0.2733	0.012
0.2766	0.012
0.28	0.012
0.2833	0.012
0.2866	0.012
0.29	0.012
0.2933	0.012
0.2966	0.012
0.3	0.009
0.3033	0.012
0.3066	0.012
0.31	0.009
0.3133	0.009
0.3166	0.012
0.32	0.009
0.3233	0.009
0.3266	0.009
0.33	0.009
0.3333	0.009
0.35	0.009
0.3666	0.009
0.3833	0.009
0.4	0.009
0.4166	0.009
0.4333	0.009
0.45	0.009
0.4666	0.009
0.4833	0.009
0.5	0.009
0.5166	0.009
0.5333	0.009
0.55	0.009

0.5666	0.003
0.5833	0.003
0.6	0.003
0.6166	0.003
0.6333	0.003
0.65	0.003
0.6666	0
0.6833	0.003
0.7	0
0.7166	0
0.7333	0.003
0.75	0.003
0.7666	0.003
0.7833	0.003
0.8	0
0.8166	0.003
0.8333	0.003
0.85	0.003
0.8666	0.003
0.8833	0
0.9	0.003
0.9166	0.003
0.9333	0.003
0.95	0.003
0.9666	0.003
0.9833	0
1	0.003
1.2	0
1.4	0
1.6	0
1.8	0
2	0
2.2	0
2.4	0
2.6	0
2.8	0
3	0
3.2	0
3.4	0
3.6	0

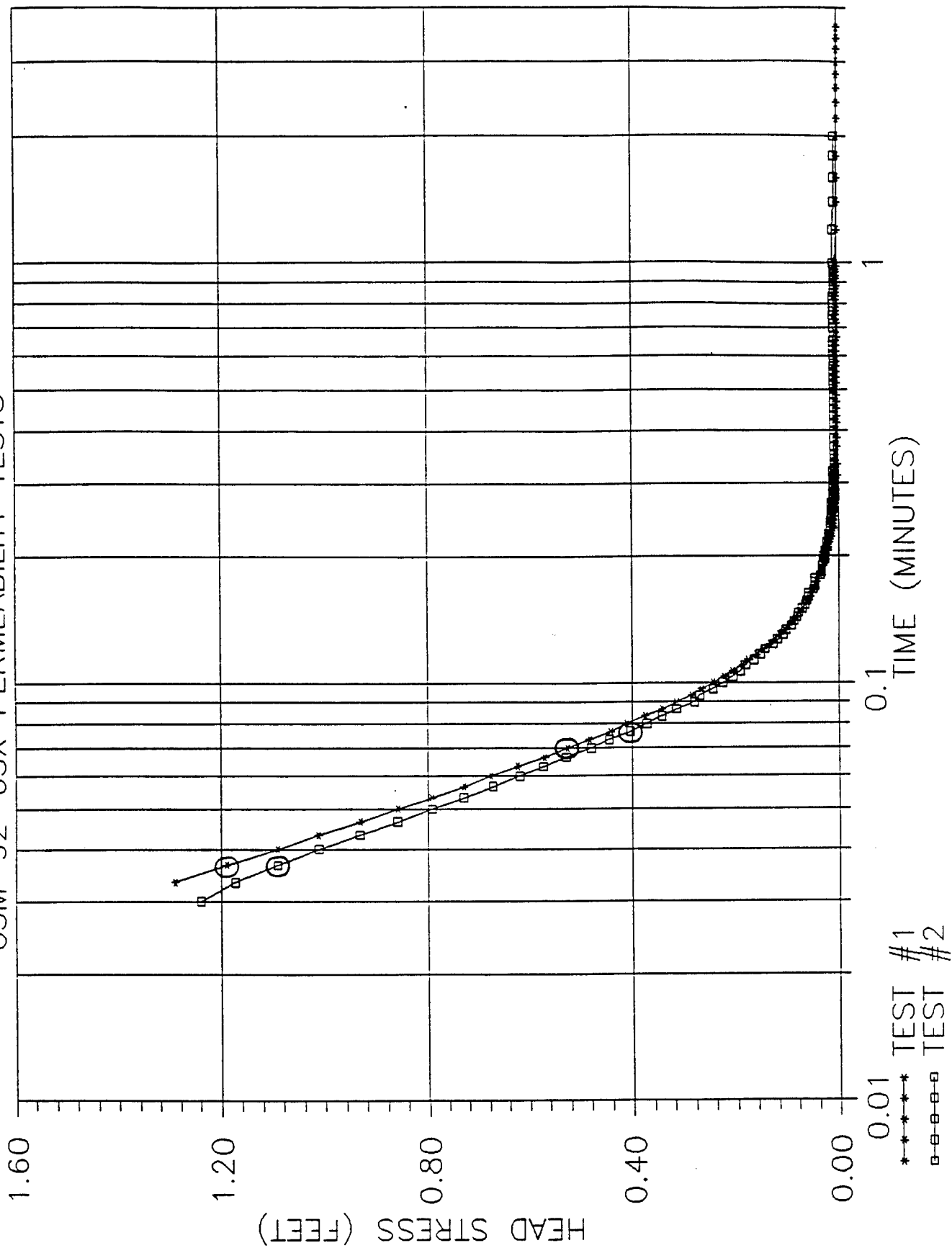
PERMEABILITY TEST RESULTS FOR G3M-92-03X

TEST 1
 HVORSLEV:
 K= 0.013 CM/SEC
 BOUWER & RICE:
 K= 0.039 CM/SEC

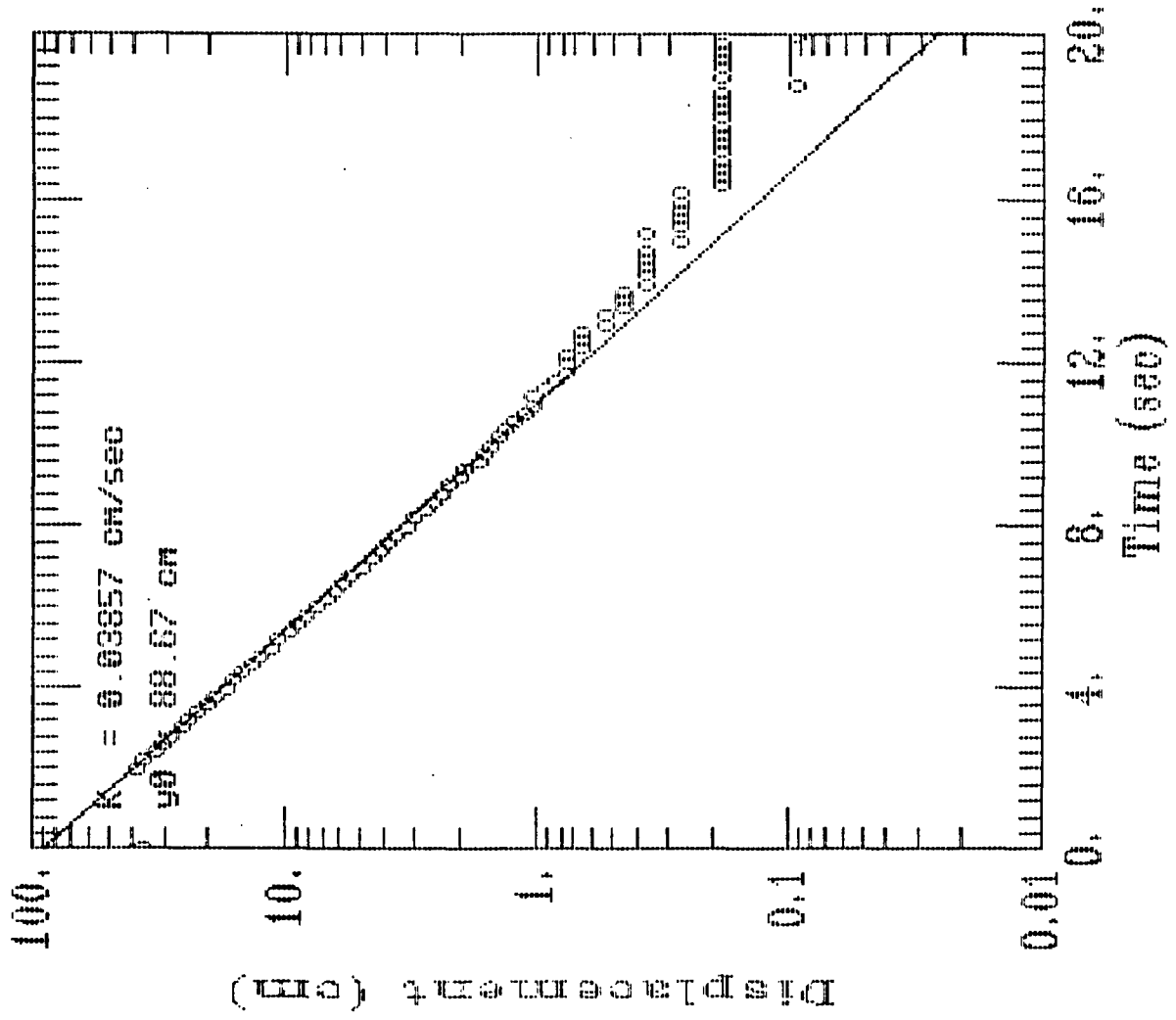
0.5666	0.009
0.5833	0.006
0.6	0.009
0.6166	0.009
0.6333	0.009
0.65	0.009
0.6666	0.006
0.6833	0.006
0.7	0.009
0.7166	0.006
0.7333	0.009
0.75	0.009
0.7666	0.006
0.7833	0.009
0.8	0.006
0.8166	0.009
0.8333	0.009
0.85	0.006
0.8666	0.006
0.8833	0.006
0.9	0.006
0.9166	0.006
0.9333	0.006
0.95	0.006
0.9666	0.006
0.9833	0.006
1	0.009
1.2	0.009
1.4	0.006
1.6	0.006
1.8	0.006
2	0.006

TEST 2
 HVORSLEV:
 K= 0.013 CM/SEC
 BOUWER & RICE:
 K= 0.039 CM/SEC

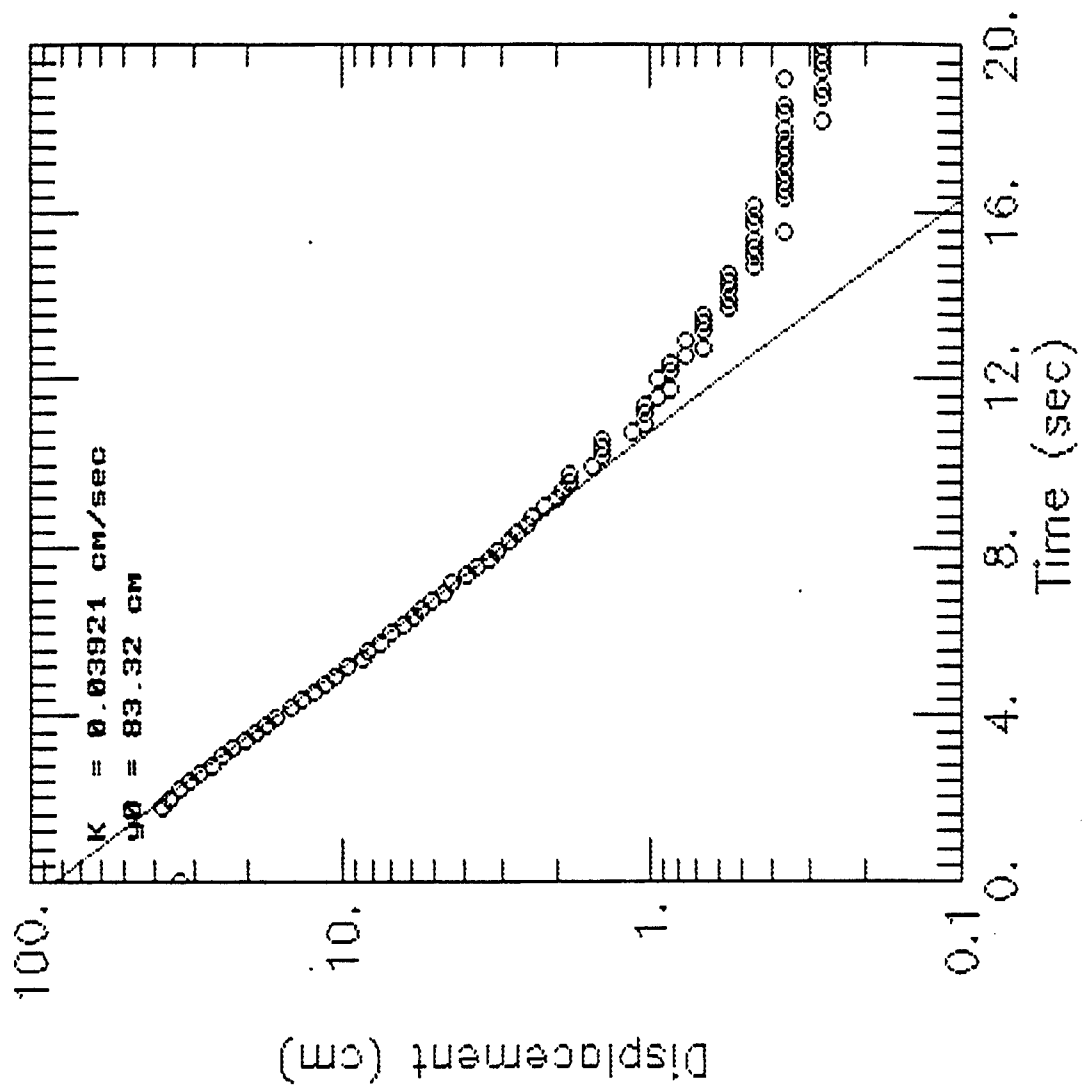
G3M-92-03X PERMEABILITY TESTS



G3M-92-03X PERMEABILITY TEST #1



G3M-92-03X PERMEABILITY TEST #2



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. G3M-92-03x

SETUP	DATE	BY WHOM
MONITORING WELL ID	G3M-92-03x 4"	R. RUSTAD
DATE OF TEST	10-07-92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SL 1000C / 10001332	
TEST #	SEL 2 / 1002	
DATA COLLECTION RATE	LOW 1	
TRANSDUCER		
SERIAL #	2046DE	
PSIG	10	
SCALE FACTOR	10.001	
OFFSET	0.004 -0.034	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	26.09' (PVC)	
WELL DEPTH (FT./TOC)	33.44 (PVC)	
XD DEPTH (FT./TOC)	32.44 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	30.44 (PVC)	
TIME OF SLUG PLACEMENT	1212	
TIME OF WL EQUILIBRATION	—	
NEW XD REFERENCE	0.00	
START TIME OF TEST	1212 (0.00)	
END TIME OF TEST	1216 (4.60)	
NOTES:	SLUG: 3'x3" Solid PVC Rod	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. G3M.92.03X

SETUP	DATE	BY WHOM
MONITORING WELL ID	G3M.92.03X	R. RUSTAD
DATE OF TEST	10.02.92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE1000C / 1CRO1232	
TEST #	SLL 3 / 2002	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	204602	
PSIG	10	
SCALE FACTOR	10.001	
OFFSET	-0.034	
INPUT CHANNEL	#1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	26.05 (PVC)	
WELL DEPTH (FT./TOC)	33.44 (PVC)	
XD DEPTH (FT./TOC)	32.44 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	30.44 (PVC)	
TIME OF SLUG PLACEMENT	1221	
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE	0.00	
START TIME OF TEST	1221	
END TIME OF TEST	1223	
NOTES:	SLUG 1 3' x 3" BAC Stock PVC	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

WELL G3M-92-04X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 6.7 FT. BORING DIAMETER = 0.833 FT

TEST 1 MINUTES	FEET	TEST 2 MINUTES	FEET
0	0	0	0.157
0.0033	0.71	0.0033	0.82
0.0066	0.89	0.0066	0.82
0.01	0.875	0.01	0.508
0.0133	0.277	0.0133	0.217
0.0166	0.823	0.0166	0.818
0.02	1.01	0.02	0.984
0.0233	1.292	0.0233	1.155
0.0266	1.253	0.0266	1.249
0.03	1.101	0.03	1.111
0.0333	0.975	0.0333	0.987
0.0366	0.868	0.0366	0.88
0.04	0.77	0.04	0.779
0.0433	0.681	0.0433	0.691
0.0466	0.606	0.0466	0.615
0.05	0.536	0.05	0.542
0.0533	0.47	0.0533	0.479
0.0566	0.419	0.0566	0.422
0.06	0.369	0.06	0.375
0.0633	0.331	0.0633	0.331
0.0666	0.29	0.0666	0.29
0.07	0.255	0.07	0.255
0.0733	0.224	0.0733	0.227
0.0766	0.198	0.0766	0.202
0.08	0.176	0.08	0.176
0.0833	0.154	0.0833	0.154
0.0866	0.135	0.0866	0.135
0.09	0.119	0.09	0.119
0.0933	0.107	0.0933	0.107
0.0966	0.097	0.0966	0.094
0.1	0.082	0.1	0.082
0.1033	0.072	0.1033	0.072
0.1066	0.063	0.1066	0.063
0.11	0.053	0.11	0.059
0.1133	0.05	0.1133	0.05
0.1166	0.047	0.1166	0.044
0.12	0.037	0.12	0.037
0.1233	0.034	0.1233	0.034
0.1266	0.031	0.1266	0.031
0.13	0.028	0.13	0.028
0.1333	0.025	0.1333	0.025
0.1366	0.022	0.1366	0.022
0.14	0.018	0.14	0.022
0.1433	0.015	0.1433	0.015
0.1466	0.015	0.1466	0.015
0.15	0.012	0.15	0.012
0.1533	0.012	0.1533	0.009
0.1566	0.012	0.1566	0.012
0.16	0.009	0.16	0.009
0.1633	0.009	0.1633	0.009
0.1666	0.006	0.1666	0.006
0.17	0.006	0.17	0.006
0.1733	0.006	0.1733	0.006
0.1766	0.006	0.1766	0.006
0.18	0.006	0.18	0.003
0.1833	0.006	0.1833	0.003
0.1866	0.003	0.1866	0.003
0.19	0.003	0.19	0.003
0.1933	0.003	0.1933	0.003
0.1966	0.003	0.1966	0.003
0.2	0.003	0.2	0.003
0.2033	0.003	0.2033	0.003
0.2066	0.003	0.2066	0
0.21	0.003	0.21	0.003
0.2133	0.003	0.2133	0
0.2166	0.003	0.2166	0
0.22	0.003	0.22	0
0.2233	0.003	0.2233	0
0.2266	0	0.2266	0
0.23	0	0.23	0
0.2333	0	0.2333	0
0.2366	0	0.2366	0
0.24	0	0.24	0
0.2433	0	0.2433	0
0.2466	0	0.2466	0
0.25	0	0.25	0
0.2533	0	0.2533	0
0.2566	0	0.2566	0
0.26	0	0.26	0
0.2633	0	0.2633	0
0.2666	0	0.2666	0
0.27	0	0.27	0
0.2733	0	0.2733	0
0.2766	0	0.2766	0
0.28	0	0.28	0
0.2833	0	0.2833	0
0.2866	0	0.2866	0
0.29	0	0.29	0
0.2933	0	0.2933	0
0.2966	0	0.2966	0
0.3	0	0.3	-0.003
0.3033	0	0.3033	0
0.3066	0	0.3066	-0.003
0.31	0	0.31	0
0.3133	0	0.3133	0
0.3166	0	0.3166	0
0.32	0	0.32	0
0.3233	0	0.3233	0
0.3266	0	0.3266	0
0.33	0	0.33	0
0.3333	0	0.3333	0
0.35	0	0.35	-0.003
0.3666	0	0.3666	-0.003
0.3833	0	0.3833	0
0.4	0	0.4	-0.003
0.4166	0	0.4166	-0.003
0.4333	0	0.4333	-0.003
0.45	0	0.45	-0.003
0.4666	0	0.4666	-0.003
0.4833	0	0.4833	-0.003
0.5	0	0.5	-0.003
0.5166	0	0.5166	-0.003
0.5333	0	0.5333	-0.003
0.55	0	0.55	-0.003

0.5666	0
0.5833	0
0.6	0
0.6166	0
0.6333	-0.003
0.65	0
0.6666	0
0.6833	-0.003
0.7	-0.003
0.7166	0
0.7333	-0.003
0.75	-0.003
0.7666	-0.003
0.7833	-0.003
0.8	0
0.8166	0
0.8333	0
0.85	0
0.8666	0
0.8833	0
0.9	0
0.9166	0
0.9333	0
0.95	0
0.9666	0
0.9833	0
1	-0.003
1.2	0
1.4	0
1.6	0
1.8	0
2	0
2.2	0
2.4	0
2.6	0
2.8	0
3	0
3.2	0
3.4	0
3.6	0
3.8	0
4	-0.003
4.2	-0.003

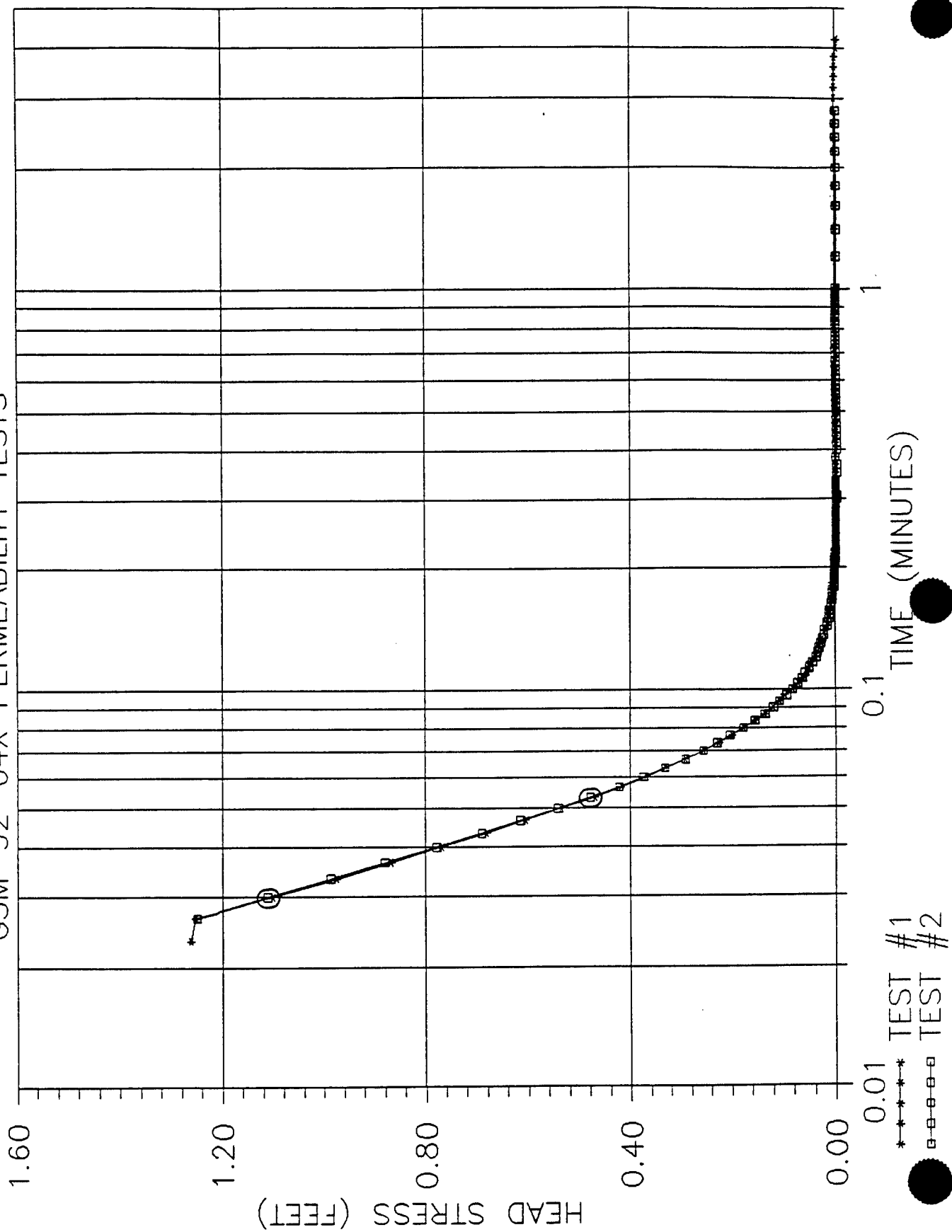
PERMEABILITY TEST RESULTS FOR G3M-02-04X

TEST 1
 HVORSLEV:
 K= 0.020 CM/SEC
 BOUWER & RICE:
 K= 0.002 CM/SEC

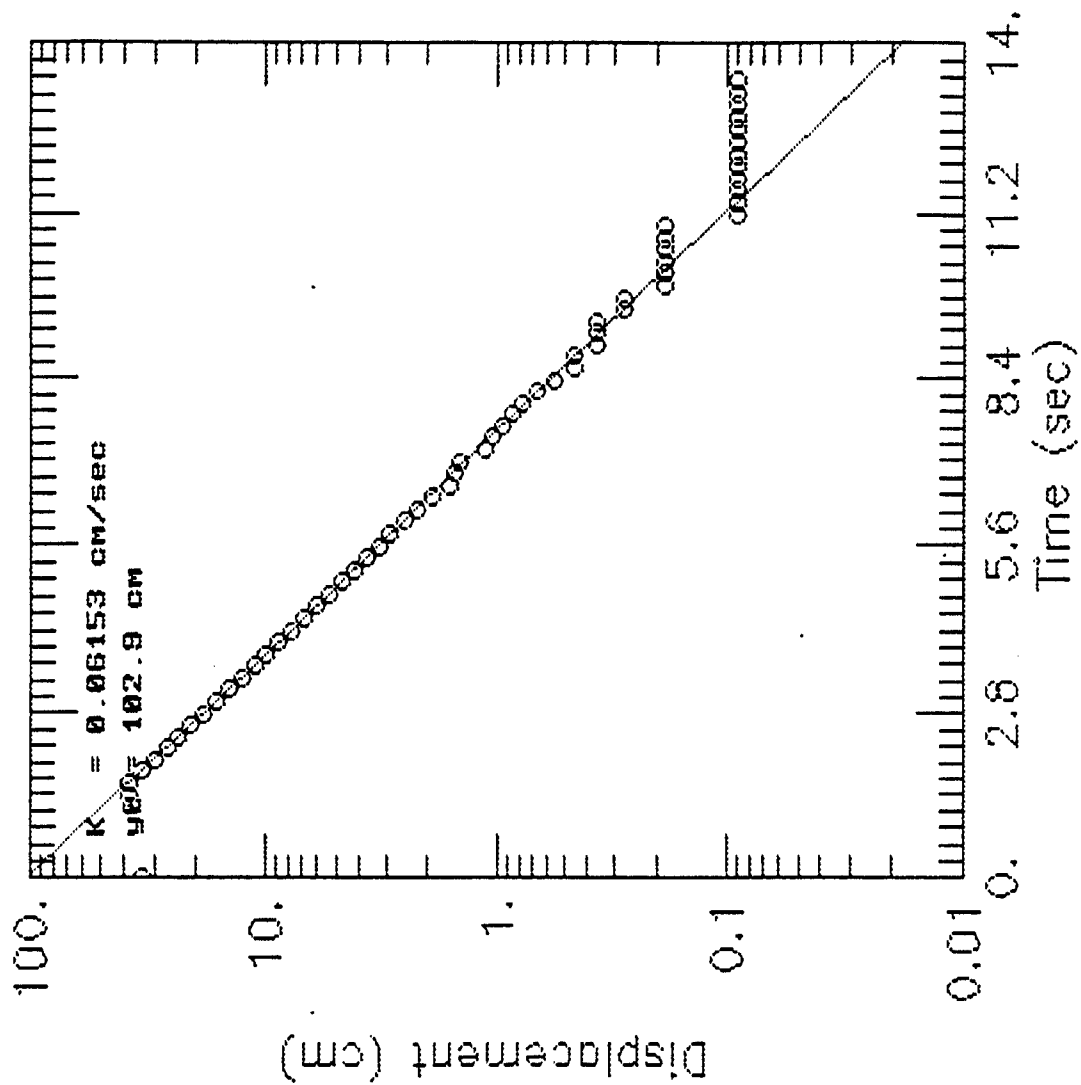
0.5666	-0.003
0.5833	-0.003
0.6	-0.003
0.6166	-0.003
0.6333	-0.003
0.65	-0.003
0.6666	-0.003
0.6833	-0.003
0.7	-0.003
0.7166	-0.003
0.7333	-0.003
0.75	-0.003
0.7666	-0.003
0.7833	-0.003
0.8	-0.003
0.8166	-0.003
0.8333	-0.003
0.85	-0.003
0.8666	-0.003
0.8833	-0.003
0.9	-0.003
0.9166	-0.003
0.9333	-0.003
0.95	-0.003
0.9666	-0.003
0.9833	-0.003
1	-0.003
1.2	-0.003
1.4	-0.003
1.6	-0.003
1.8	-0.003
2	-0.003
2.2	-0.003
2.4	-0.003
2.6	-0.003
2.8	-0.003

TEST 2
 HVORSLEV:
 K= 0.020 CM/SEC
 BOUWER & RICE:
 K= 0.060 CM/SEC

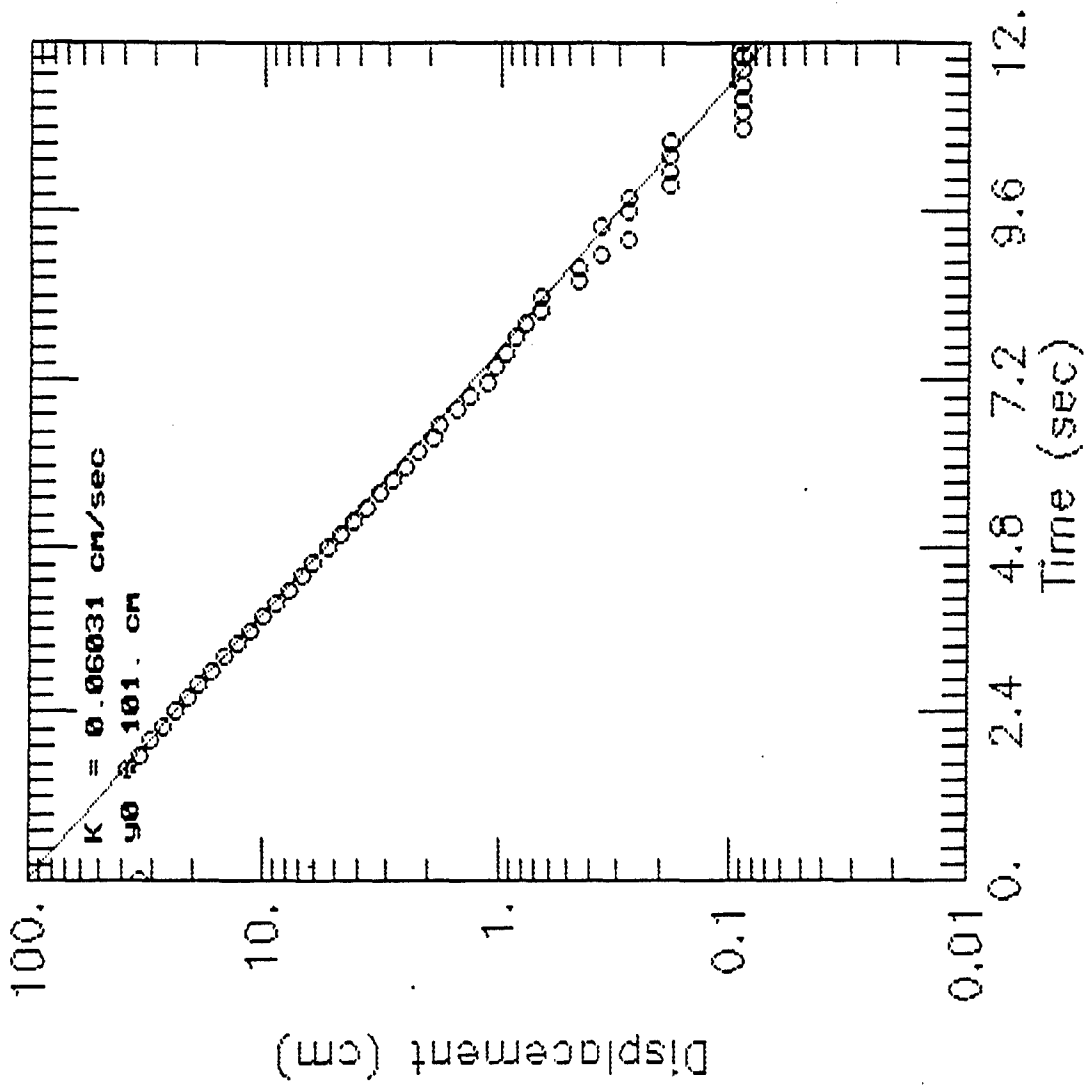
G3M-92-04X PERMEABILITY TESTS



G3M-92-04X PERMEABILITY TEST #1



G3M-92-04 PERMEABILITY TEST #2



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	GJM-92-04x 4"	K. TRUSTAD
DATE OF TEST	10-08-92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE 1000 C / 1 RCO1732	
TEST #	SEL 3 / 2 OF 2	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	204502	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	28.72 (PVC)	
WELL DEPTH (FT./TOC)	35.40 (PVC)	
XD DEPTH (FT./TOC)	34.40 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	32.40 (PVC)	
TIME OF SLUG PLACEMENT	1000	
TIME OF WL EQUILIBRATION	1002	
NEW XD REFERENCE	6.00	
START TIME OF TEST	1003	
END TIME OF TEST	1006	
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

00001500

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	G3M-92-04X 4"	R. RUSTAD
DATE OF TEST	10-08-92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE1000 C / 1260732	
TEST #	SEL 2 / 1022	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	2045-02	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	28.72' (PVC)	
WELL DEPTH (FT./TOC)	35.40 (PVC)	
XD DEPTH (FT./TOC)	34.40 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	32.40 (PVC)	
TIME OF SLUG PLACEMENT	0952	
TIME OF WL EQUILIBRATION	0953	
NEW XD REFERENCE	0.00	
START TIME OF TEST	0954	
END TIME OF TEST	0958	
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

G3M-02-05X

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 7.2 FT, BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	-0.003
0.0033	0.666
0.0066	0.666
0.01	1.335
0.0133	1.338
0.0166	1.139
0.02	1.458
0.0233	0.315
0.0266	1.42
0.03	1.548
0.0333	1.442
0.0366	1.35
0.04	1.259
0.0433	1.193
0.0466	1.12
0.05	1.057
0.0533	0.994
0.0566	0.934
0.06	0.874
0.0633	0.82
0.0666	0.767
0.07	0.719
0.0733	0.672
0.0766	0.628
0.08	0.59
0.0833	0.549
0.0866	0.517
0.09	0.482
0.0933	0.445
0.0966	0.413
0.1	0.391
0.1033	0.368
0.1066	0.337
0.11	0.312
0.1133	0.293
0.1166	0.274
0.12	0.258
0.1233	0.239
0.1266	0.224
0.13	0.211
0.1333	0.195
0.1366	0.179
0.14	0.17
0.1433	0.157
0.1466	0.148
0.15	0.138
0.1533	0.129
0.1566	0.119
0.16	0.113
0.1633	0.104
0.1666	0.097
0.17	0.091
0.1733	0.088
0.1766	0.082
0.18	0.075
0.1833	0.069
0.1866	0.063
0.19	0.063
0.1933	0.059
0.1966	0.053
0.2	0.053
0.2033	0.047
0.2066	0.047
0.21	0.044
0.2133	0.041
0.2166	0.041
0.22	0.037
0.2233	0.034
0.2266	0.034
0.23	0.031
0.2333	0.031
0.2366	0.028
0.24	0.028
0.2433	0.025
0.2466	0.025
0.25	0.025
0.2533	0.022
0.2566	0.022
0.26	0.022
0.2633	0.025
0.2666	0.018
0.27	0.018
0.2733	0.018
0.2766	0.018
0.28	0.015
0.2833	0.015
0.2866	0.015
0.29	0.015
0.2933	0.015
0.2966	0.015
0.3	0.015
0.3033	0.012
0.3066	0.012
0.31	0.012
0.3133	0.012
0.3166	0.012
0.32	0.012
0.3233	0.012
0.3266	0.012
0.33	0.012
0.3333	0.012
0.35	0.009
0.3666	0.009
0.3833	0.009
0.4	0.009
0.4166	0.009
0.4333	0.008
0.45	0.008
0.4666	0.008
0.4833	0.008
0.5	0.008
0.5166	0.008
0.5333	0.008
0.55	0.008

TEST 2
MINUTES

FEET

0	0
0.0033	0
0.0066	-0.003
0.01	0.536
0.0133	1.594
0.0166	1.89
0.02	1.291
0.0233	1.101
0.0266	0.217
0.03	1.347
0.0333	1.508
0.0366	1.404
0.04	1.313
0.0433	1.256
0.0466	1.177
0.05	1.107
0.0533	1.047
0.0566	0.987
0.06	0.927
0.0633	0.868
0.0666	0.814
0.07	0.763
0.0733	0.713
0.0766	0.675
0.08	0.634
0.0833	0.596
0.0866	0.561
0.09	0.523
0.0933	0.492
0.0966	0.463
0.1	0.432
0.1033	0.404
0.1066	0.378
0.11	0.353
0.1133	0.328
0.1166	0.315
0.12	0.287
0.1233	0.271
0.1266	0.255
0.13	0.236
0.1333	0.217
0.1366	0.211
0.14	0.198
0.1433	0.186
0.1466	0.173
0.15	0.164
0.1533	0.151
0.1566	0.145
0.16	0.135
0.1633	0.126
0.1666	0.119
0.17	0.113
0.1733	0.107
0.1766	0.101
0.18	0.094
0.1833	0.088
0.1866	0.085
0.19	0.078
0.1933	0.075
0.1966	0.069
0.2	0.066
0.2033	0.063
0.2066	0.059
0.21	0.056
0.2133	0.053
0.2166	0.05
0.22	0.05
0.2233	0.047
0.2266	0.044
0.23	0.044
0.2333	0.041
0.2366	0.037
0.24	0.037
0.2433	0.034
0.2466	0.034
0.25	0.034
0.2533	0.031
0.2566	0.031
0.26	0.031
0.2633	0.028
0.2666	0.028
0.27	0.028
0.2733	0.025
0.2766	0.025
0.28	0.025
0.2833	0.025
0.2866	0.025
0.29	0.025
0.2933	0.022
0.2966	0.022
0.3	0.022
0.3033	0.022
0.3066	0.022
0.31	0.018
0.3133	0.018
0.3166	0.018
0.32	0.018
0.3233	0.018
0.3266	0.018
0.33	0.018
0.3333	0.018
0.35	0.018
0.3666	0.015
0.3833	0.015
0.4	0.015
0.4166	0.012
0.4333	0.012
0.45	0.012
0.4666	0.012
0.4833	0.012
0.5	0.012
0.5166	0.012
0.5333	0.012
0.55	0.012

0.5666	0.006
0.5833	0.006
0.6	0.006
0.6166	0.006
0.6333	0.006
0.65	0.006
0.6666	0.006
0.6833	0.006
0.7	0.006
0.7166	0.006
0.7333	0.006
0.75	0.006
0.7666	0.006
0.7833	0.006
0.8	0.006
0.8166	0.006
0.8333	0.006
0.85	0.006
0.8666	0.006
0.8833	0.006
0.9	0.006
0.9166	0.006
0.9333	0.006
0.95	0.006
0.9666	0.006
0.9833	0.006
1	0.006
1.2	0.006
1.4	0.006
1.6	0.006
1.8	0.003
2	0.006
2.2	0.003
2.4	0.009
2.6	0.003
2.8	0.006
3	0.006
3.2	0.006
3.4	0.003
3.6	0.006
3.8	0.006
4	0.003
4.2	0.006
4.4	0.006
4.6	0.006
4.8	0.006
5	0.006

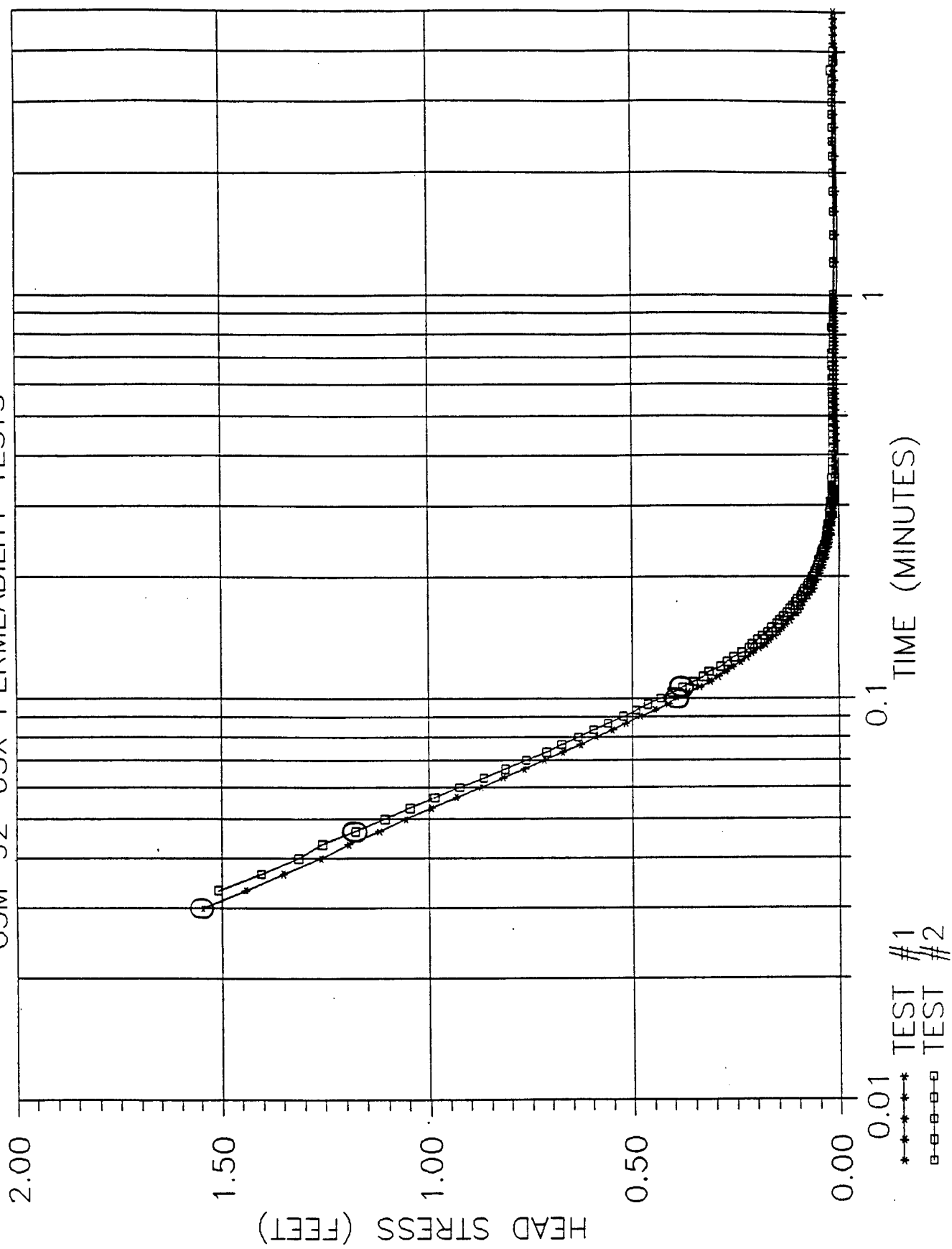
PERMEABILITY TEST RESULTS FOR G3M-92-05X

TEST 1
 HVORSLEV:
 K= 0.010 CM/SEC
 BOUWER & RICE:
 K= 0.031 CM/SEC

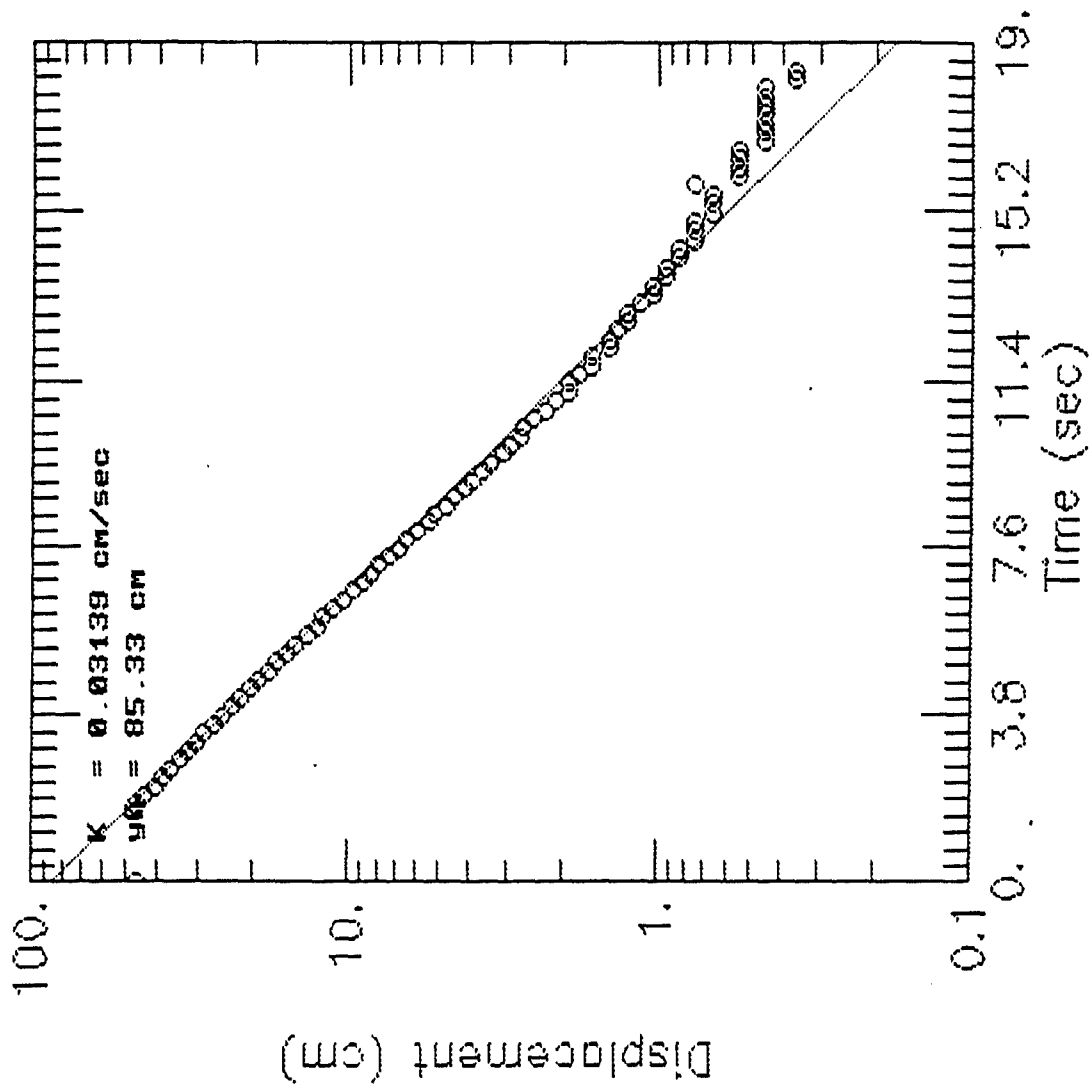
0.5666	0.012
0.5833	0.012
0.6	0.012
0.6166	0.012
0.6333	0.009
0.65	0.009
0.6666	0.012
0.6833	0.012
0.7	0.012
0.7166	0.012
0.7333	0.009
0.75	0.009
0.7666	0.009
0.7833	0.009
0.8	0.009
0.8166	0.009
0.8333	0.012
0.85	0.009
0.8666	0.009
0.8833	0.009
0.9	0.009
0.9166	0.009
0.9333	0.009
0.95	0.009
0.9666	0.009
0.9833	0.009
1	0.009
1.2	0.009
1.4	0.009
1.6	0.009
1.8	0.009
2	0.009
2.2	0.009
2.4	0.009
2.6	0.009
2.8	0.009
3	0.009
3.2	0.009
3.4	0.009
3.6	0.012
3.8	0.006
4	0.006

TEST 2
 HVORSLEV:
 K= 0.010 CM/SEC
 BOUWER & RICE:
 K= 0.030 CM/SEC

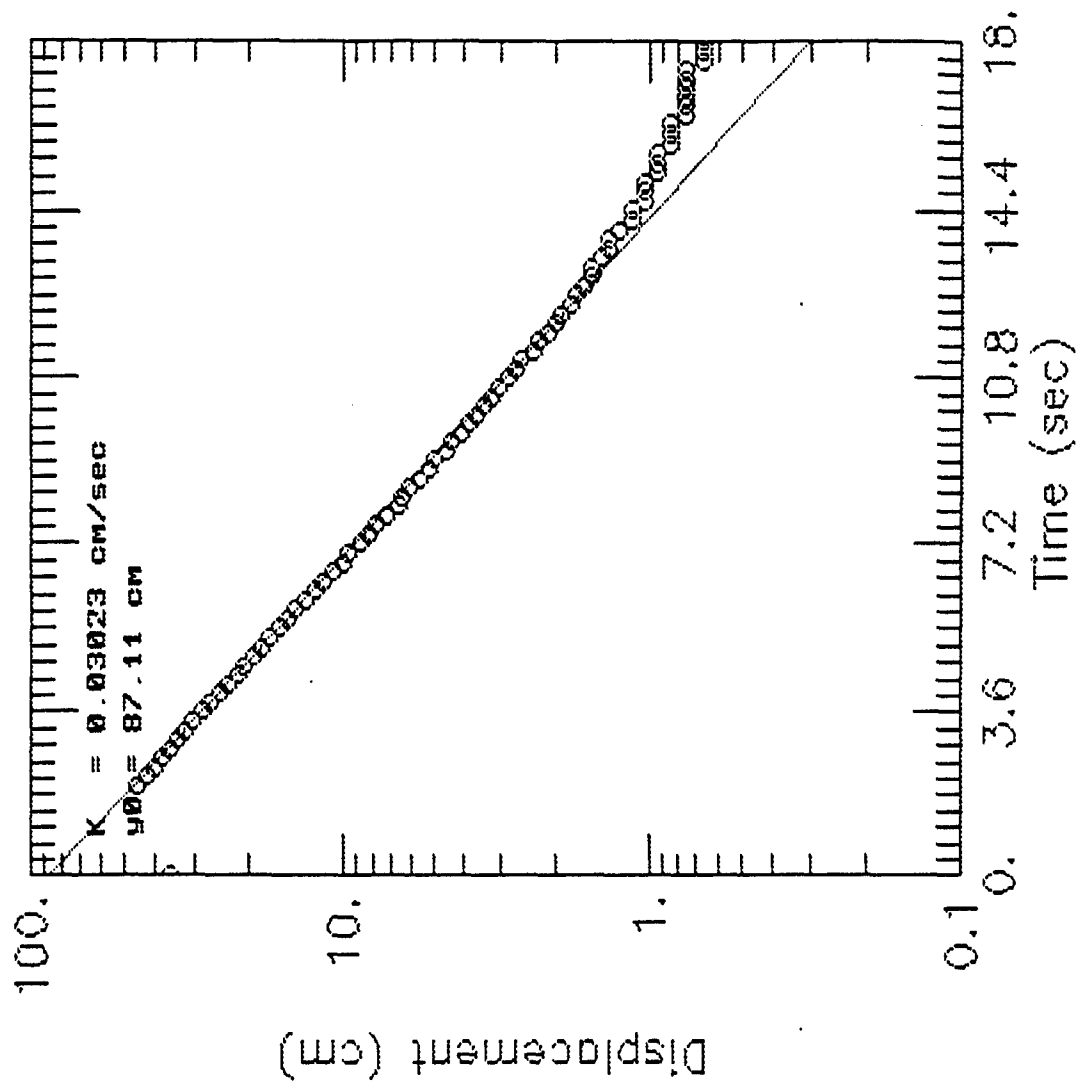
G3M-92-05X PERMEABILITY TESTS



G3M-92-05X PERMEABILITY TEST #1



G3M-92-05X PERMEABILITY TEST #2



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	63M.92.05X 4"	TZ. RUSTAD
DATE OF TEST	10.07.92	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE 1000C / 1KCD1932	
TEST #	SEL 10 / 10P 2	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	2045 DE	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	29.99 (PVC)	
WELL DEPTH (FT./TOC)	37.23 (PVC)	
XD DEPTH (FT./TOC)	36.23 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	34.23 (PVC)	
TIME OF SLUG PLACEMENT		
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE		
START TIME OF TEST		
END TIME OF TEST		
NOTES:	SLUG 3' x 3" PVC BAR STOCK	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	63M-92-05X 4"	R. RUSTAD
DATE OF TEST	10-07-92	
TYPE OF TEST	RESINUC HEAD	
HERMIT TYPE/SERIAL#	SE 10000 / 1K201725	
TEST #	SEL 11 / 2052	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	2045 DE	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	#1	
TEST DATA		
INPUT MODE (TOC/SUR)	29.99 (PVC) TOC	
STATIC WATER LEVEL (FT./TOC)	37.23 (PVC) 29.99 (PVC)	
WELL DEPTH (FT./TOC)	36 37.23 (PVC)	
XD DEPTH (FT./TOC)	36.23 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	34.23 (PVC)	
TIME OF SLUG PLACEMENT		
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE		
START TIME OF TEST		
END TIME OF TEST		
NOTES: SLUG: 3' x 3" BAR	Stock PVC	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

WELL G3M-92-06X

WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 6.9 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	-0.012
0.0033	0.003
0.0066	0.729
0.01	0.318
0.0133	1.455
0.0166	1.41
0.02	0.7
0.0233	1.221
0.0266	1.559
0.03	1.401
0.0333	1.332
0.0366	1.243
0.04	1.161
0.0433	1.079
0.0466	1.01
0.05	0.937
0.0533	0.871
0.0566	0.808
0.06	0.754
0.0633	0.691
0.0666	0.647
0.07	0.602
0.0733	0.549
0.0766	0.52
0.08	0.487
0.0833	0.445
0.0866	0.404
0.09	0.375
0.0933	0.35
0.0966	0.321
0.1	0.296
0.1033	0.277
0.1066	0.255
0.11	0.236
0.1133	0.214
0.1166	0.202
0.12	0.189
0.1233	0.173
0.1266	0.16
0.13	0.148
0.1333	0.142
0.1366	0.132
0.14	0.119
0.1433	0.107
0.1466	0.101
0.15	0.101
0.1533	0.088
0.1566	0.085
0.16	0.075
0.1633	0.072
0.1666	0.069
0.17	0.063
0.1733	0.06
0.1766	0.06
0.18	0.053
0.1833	0.047
0.1866	0.05
0.19	0.044
0.1933	0.037
0.1966	0.037
0.2	0.037
0.2033	0.034
0.2066	0.031
0.21	0.031
0.2133	0.028
0.2166	0.028
0.22	0.025
0.2233	0.022
0.2266	0.022
0.23	0.022
0.2333	0.018
0.2366	0.015
0.24	0.018
0.2433	0.022
0.2466	0.015
0.25	0.012
0.2533	0.018
0.2566	0.009
0.26	0.009
0.2633	0.009
0.2666	0.015
0.27	0.018
0.2733	0.018
0.2766	0.018
0.28	0.006
0.2833	0.009
0.2866	0.009
0.29	0.009
0.2933	0.003
0.2966	0.003
0.3	0.003
0.3033	0.006
0.3066	0.009
0.31	0.006
0.3133	0.009
0.3166	0.009
0.32	0.006
0.3233	0.006
0.3266	0.006
0.33	0.006
0.3333	0.006
0.35	0.003
0.3666	0.006
0.3833	0.003
0.4	0.003
0.4166	0.003
0.4333	0.003
0.45	0
0.4666	0
0.4833	0
0.5	0
0.5166	0.003
0.5333	0
0.55	0

TEST 2
MINUTES

FEET

0	-0.003
0.0033	-0.015
0.0066	0.05
0.01	1.874
0.0133	1.982
0.0166	1.114
0.02	1.051
0.0233	1.852
0.0266	1.433
0.03	1.385
0.0333	1.303
0.0366	1.215
0.04	1.133
0.0433	1.057
0.0466	0.988
0.05	0.921
0.0533	0.852
0.0566	0.789
0.06	0.744
0.0633	0.681
0.0666	0.643
0.07	0.59
0.0733	0.558
0.0766	0.508
0.08	0.476
0.0833	0.438
0.0866	0.41
0.09	0.378
0.0933	0.356
0.0966	0.328
0.1	0.306
0.1033	0.284
0.1066	0.258
0.11	0.246
0.1133	0.224
0.1166	0.211
0.12	0.202
0.1233	0.186
0.1266	0.173
0.13	0.16
0.1333	0.151
0.1366	0.138
0.14	0.132
0.1433	0.126
0.1466	0.116
0.15	0.113
0.1533	0.104
0.1566	0.097
0.16	0.094
0.1633	0.088
0.1666	0.085
0.17	0.082
0.1733	0.075
0.1766	0.072
0.18	0.069
0.1833	0.066
0.1866	0.063
0.19	0.059
0.1933	0.056
0.1966	0.053
0.2	0.053
0.2033	0.053
0.2066	0.05
0.21	0.047
0.2133	0.047
0.2166	0.044
0.22	0.044
0.2233	0.037
0.2266	0.041
0.23	0.044
0.2333	0.037
0.2366	0.034
0.24	0.034
0.2433	0.037
0.2466	0.034
0.25	0.034
0.2533	0.034
0.2566	0.025
0.26	0.028
0.2633	0.034
0.2666	0.031
0.27	0.034
0.2733	0.031
0.2766	0.028
0.28	0.025
0.2833	0.025
0.2866	0.028
0.29	0.031
0.2933	0.025
0.2966	0.022
0.3	0.025
0.3033	0.028
0.3066	0.025
0.31	0.025
0.3133	0.022
0.3166	0.025
0.32	0.031
0.3233	0.031
0.3266	0.022
0.33	0.018
0.3333	0.022
0.35	0.022
0.3666	0.025
0.3833	0.025
0.4	0.012
0.4166	0.022
0.4333	0.018
0.45	0.022
0.4666	0.025
0.4833	0.022
0.5	0.015
0.5166	0.018
0.5333	0.022
0.55	0.015

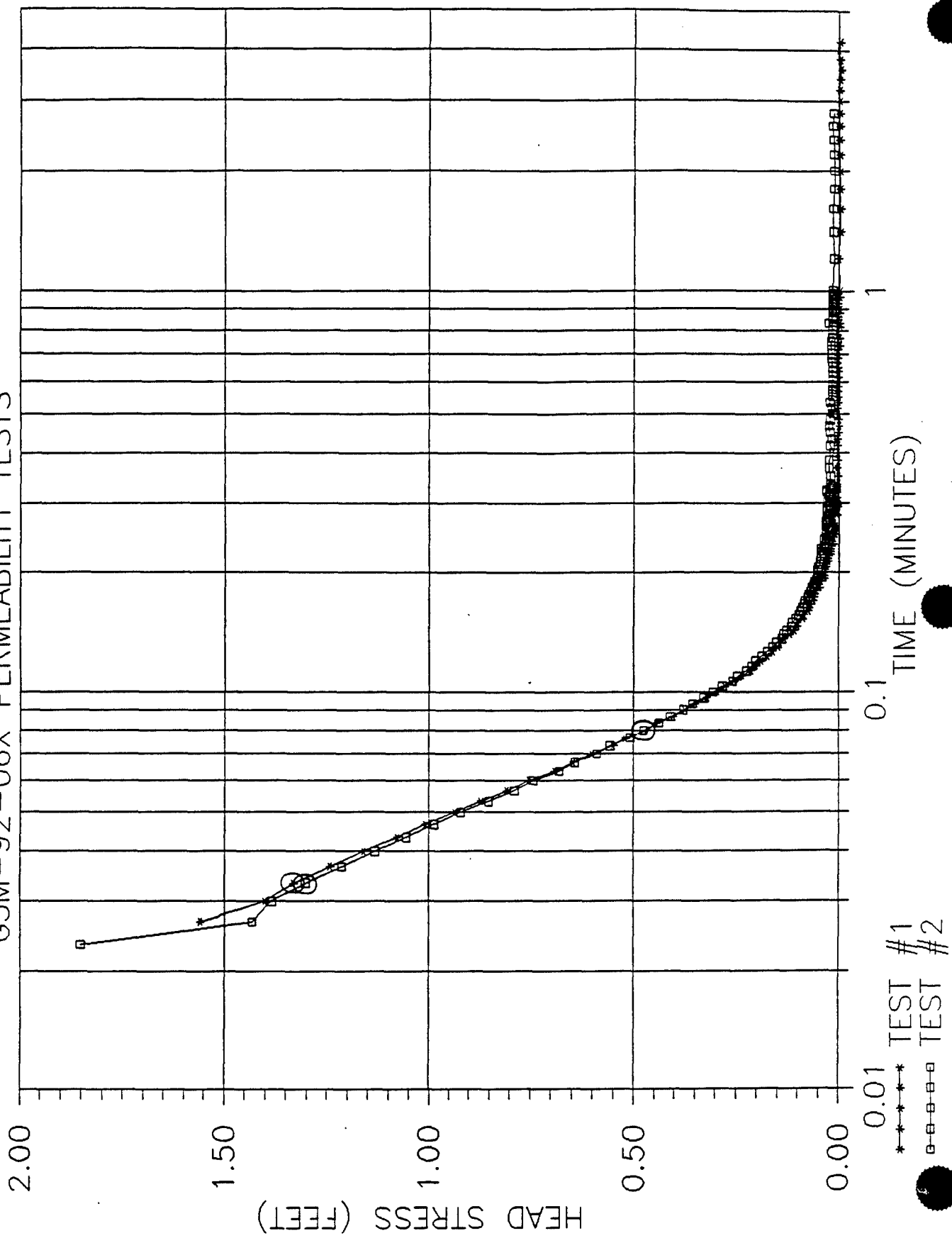
0.5666	0
0.5833	0
0.6	0
0.6166	0
0.6333	0
0.65	0
0.6666	0.003
0.6833	0
0.7	0
0.7166	0
0.7333	-0.003
0.75	0
0.7666	-0.003
0.7833	0
0.8	0
0.8166	-0.003
0.8333	-0.003
0.85	0
0.8666	0
0.8833	-0.003
0.9	-0.003
0.9166	0
0.9333	0
0.95	0
0.9666	-0.003
0.9833	0
1	-0.003
1.2	0
1.4	-0.003
1.6	-0.003
1.8	-0.003
2	-0.003
2.2	-0.003
2.4	-0.003
2.6	-0.003
2.8	-0.003
3	-0.003
3.2	-0.003
3.4	-0.003
3.6	-0.006
3.8	-0.003
4	0
4.2	-0.003

PERMEABILITY TEST RESULTS FOR G3M-92-06X
 TEST 1
 HVORSLEV:
 K= 0.012 CM/SEC
 BOUWER & RICE:
 K= 0.036 CM/SEC

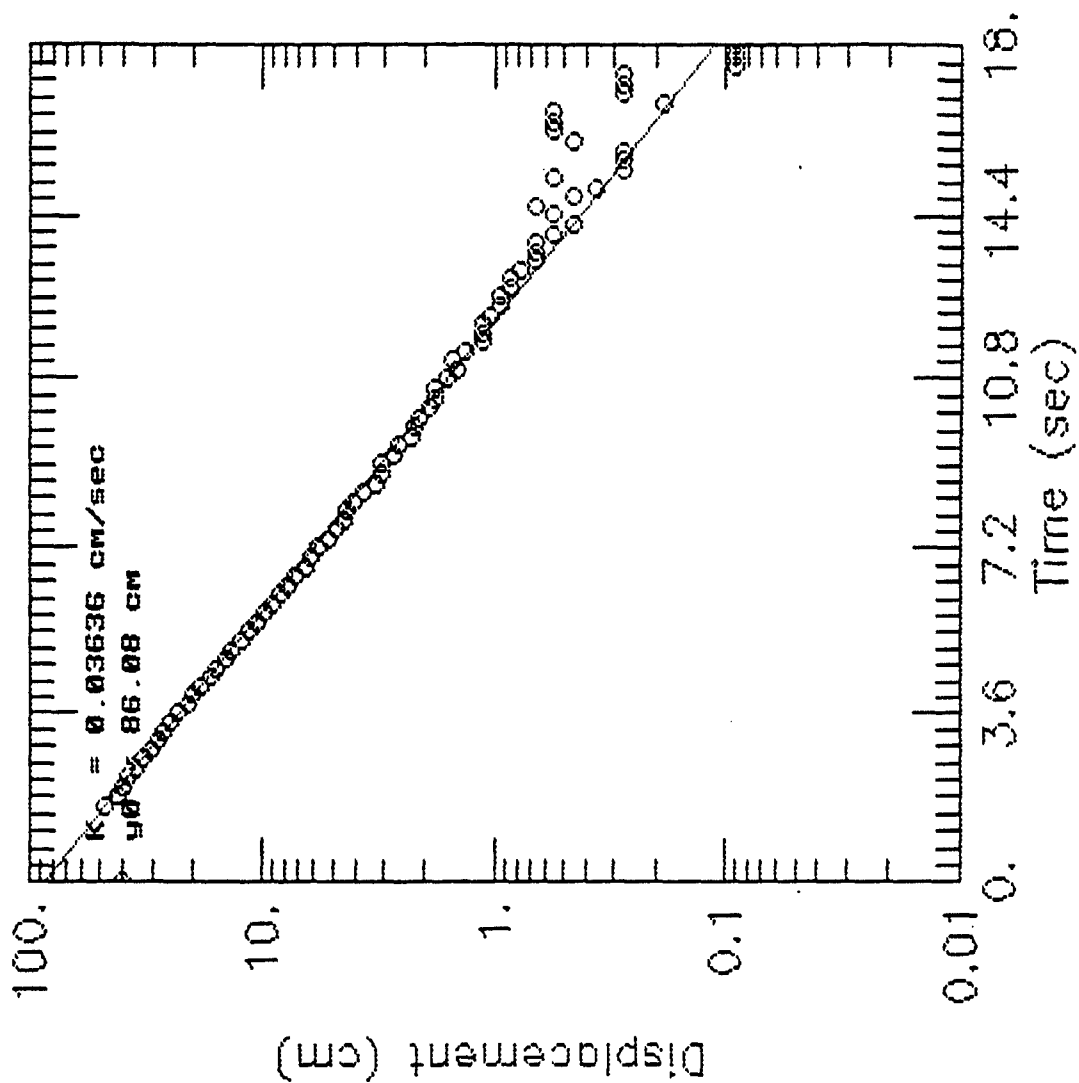
0.5666	0.015
0.5833	0.015
0.6	0.015
0.6166	0.015
0.6333	0.015
0.65	0.015
0.6666	0.015
0.6833	0.018
0.7	0.015
0.7166	0.018
0.7333	0.018
0.75	0.018
0.7666	0.012
0.7833	0.015
0.8	0.015
0.8166	0.015
0.8333	0.025
0.85	0.015
0.8666	0.015
0.8833	0.015
0.9	0.015
0.9166	0.015
0.9333	0.015
0.95	0.015
0.9666	0.015
0.9833	0.012
1	0.015
1.2	0.012
1.4	0.015
1.6	0.015
1.8	0.012
2	0.012
2.2	0.012
2.4	0.012
2.6	0.015
2.8	0.012

TEST 2
 HVORSLEV:
 K= 0.012 CM/SEC
 BOUWER & RICE:
 K= 0.035 CM/SEC

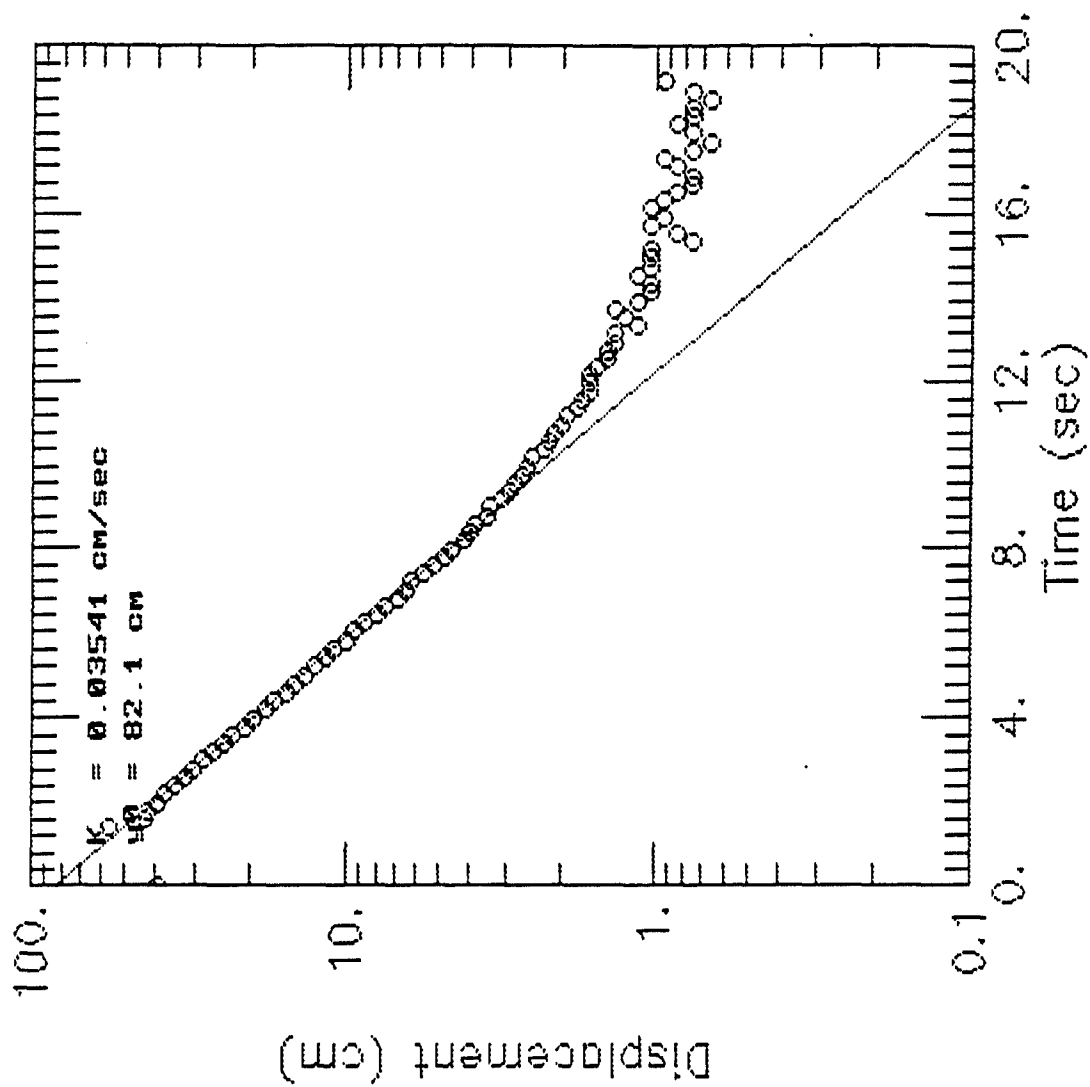
G3M-92-06X PERMEABILITY TESTS



G3M-92-06X PERMEABILITY TEST #1



G3M-92-06X PERMEABILITY TEST #2



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	GJM-92-06X 4"	D. Pierce Z. Rustad
DATE OF TEST	10.07.92	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE1000C / 1K0072	
TEST #	SEL 8 / 1 OF 2	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	2045D2	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	#1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	27.40 (PVC)	
WELL DEPTH (FT./TOC)	34.26 (PVC)	
XD DEPTH (FT./TOC)	33.26 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	31.26 (PVC)	
TIME OF SLUG PLACEMENT		
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE		
START TIME OF TEST		
END TIME OF TEST		
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	GJM-92-06X 4"	R. RUSTAD
DATE OF TEST	10.02.92	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE 1000 C / 1K0232	
TEST #	SEL 9 / 2042	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	2045 DE	
PSIG	10	
SCALE FACTOR	9.983	
OFFSET	-0.035	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	27.40 (PVC)	
WELL DEPTH (FT./TOC)	34.26 (PVC)	
XD DEPTH (FT./TOC)	33.26 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	31.26 (PVC)	
TIME OF SLUG PLACEMENT		
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE		
START TIME OF TEST		
END TIME OF TEST		
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

WELL G3M-92-07X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 7.1 FT, BORING DIAMETER = 0.833 FT

TEST 1 MINUTES	FEET	TEST 2 MINUTES	FEET
0	0	0	-0.003
0.0033	0.015	0.0033	-0.009
0.0066	1.23	0.0066	0.328
0.01	0.86	0.01	1.669
0.0133	0.793	0.0133	1.328
0.0166	1.176	0.0166	1.16
0.02	1.445	0.02	1.189
0.0233	1.84	0.0233	1.657
0.0266	1.733	0.0266	1.707
0.03	1.704	0.03	1.717
0.0333	1.644	0.0333	1.663
0.0366	1.6	0.0366	1.616
0.04	1.549	0.04	1.571
0.0433	1.511	0.0433	1.527
0.0466	1.473	0.0466	1.486
0.05	1.423	0.05	1.439
0.0533	1.386	0.0533	1.407
0.0566	1.347	0.0566	1.363
0.06	1.309	0.06	1.331
0.0633	1.26	0.0633	1.303
0.0666	1.236	0.0666	1.256
0.07	1.205	0.07	1.22
0.0733	1.173	0.0733	1.189
0.0766	1.136	0.0766	1.151
0.08	1.1	0.08	1.122
0.0833	1.069	0.0833	1.087
0.0866	1.04	0.0866	1.05
0.09	1.008	0.09	1.024
0.0933	0.983	0.0933	0.996
0.0966	0.951	0.0966	0.967
0.1	0.923	0.1	0.936
0.1033	0.891	0.1033	0.907
0.1066	0.866	0.1066	0.879
0.11	0.836	0.11	0.853
0.1133	0.809	0.1133	0.825
0.1166	0.787	0.1166	0.803
0.12	0.762	0.12	0.771
0.1233	0.743	0.1233	0.755
0.1266	0.717	0.1266	0.73
0.13	0.695	0.13	0.706
0.1333	0.676	0.1333	0.686
0.1366	0.657	0.1366	0.667
0.14	0.635	0.14	0.645
0.1433	0.616	0.1433	0.629
0.1466	0.597	0.1466	0.61
0.15	0.578	0.15	0.591
0.1533	0.562	0.1533	0.572
0.1566	0.547	0.1566	0.556
0.16	0.531	0.16	0.534
0.1633	0.515	0.1633	0.525
0.1666	0.499	0.1666	0.506
0.17	0.483	0.17	0.493
0.1733	0.471	0.1733	0.48
0.1766	0.458	0.1766	0.468
0.18	0.442	0.18	0.452
0.1833	0.433	0.1833	0.439
0.1866	0.42	0.1866	0.426
0.19	0.404	0.19	0.414
0.1933	0.395	0.1933	0.404
0.1966	0.385	0.1966	0.392
0.2	0.376	0.2	0.382
0.2033	0.363	0.2033	0.37
0.2066	0.354	0.2066	0.36
0.21	0.344	0.21	0.351
0.2133	0.335	0.2133	0.341
0.2166	0.325	0.2166	0.332
0.22	0.319	0.22	0.325
0.2233	0.309	0.2233	0.316
0.2266	0.3	0.2266	0.309
0.23	0.294	0.23	0.3
0.2333	0.287	0.2333	0.294
0.2366	0.281	0.2366	0.284
0.24	0.271	0.24	0.278
0.2433	0.268	0.2433	0.271
0.2466	0.259	0.2466	0.262
0.25	0.253	0.25	0.259
0.2533	0.246	0.2533	0.253
0.2566	0.243	0.2566	0.246
0.26	0.234	0.26	0.24
0.2633	0.23	0.2633	0.234
0.2666	0.227	0.2666	0.227
0.27	0.221	0.27	0.224
0.2733	0.215	0.2733	0.221
0.2766	0.211	0.2766	0.215
0.28	0.205	0.28	0.211
0.2833	0.202	0.2833	0.205
0.2866	0.196	0.2866	0.202
0.29	0.192	0.29	0.196
0.2933	0.186	0.2933	0.192
0.2966	0.186	0.2966	0.189
0.3	0.18	0.3	0.186
0.3033	0.177	0.3033	0.18
0.3066	0.173	0.3066	0.177
0.31	0.164	0.31	0.173
0.3133	0.167	0.3133	0.167
0.3166	0.164	0.3166	0.164
0.32	0.158	0.32	0.158
0.3233	0.154	0.3233	0.156
0.3266	0.154	0.3266	0.154
0.33	0.148	0.33	0.154
0.3333	0.148	0.3333	0.151
0.35	0.132	0.35	0.132
0.3666	0.117	0.3666	0.123
0.3833	0.107	0.3833	0.11
0.4	0.094	0.4	0.098
0.4166	0.085	0.4166	0.088
0.4333	0.079	0.4333	0.079
0.45	0.069	0.45	0.072
0.4666	0.06	0.4666	0.066
0.4833	0.053	0.4833	0.056
0.5	0.047	0.5	0.05
0.5166	0.041	0.5166	0.044
0.5333	0.034	0.5333	0.041
0.55	0.031	0.55	0.034

0.5666	0.028	0.5666	0.031
0.5833	0.025	0.5833	0.028
0.6	0.022	0.6	0.025
0.6166	0.018	0.6166	0.022
0.6333	0.016	0.6333	0.018
0.65	0.015	0.65	0.016
0.6666	0.012	0.6666	0.015
0.6833	0.012	0.6833	0.012
0.7	0.015	0.7	0.012
0.7166	0.009	0.7166	0.015
0.7333	0.009	0.7333	0.015
0.75	0.009	0.75	0.012
0.7666	0.009	0.7666	0.012
0.7833	0.009	0.7833	0.012
0.8	0.006	0.8	0.012
0.8166	0.006	0.8166	0.009
0.8333	0.006	0.8333	0.009
0.85	0.006	0.85	0.012
0.8666	0.006	0.8666	0.009
0.8833	0.006	0.8833	0.009
0.9	0.006	0.9	0.009
0.9166	0.006	0.9166	0.009
0.9333	0.006	0.9333	0.009
0.95	0.006	0.95	0.009
0.9666	0.003	0.9666	0.009
0.9833	0.003	0.9833	0.009
1	0.003	1	0.006
1.2	0.003	1.2	0.006
1.4	0.003	1.4	0.003
1.6	0.003	1.6	0.003
1.8	0.003	1.8	0.003
2	0.003	2	0.003
2.2	0	2.2	0.003
2.4	0	2.4	0.003
2.6	0.003	2.6	0.003
2.8	0.003	2.8	0.003
3	0	3	0.003
3.2	0	3.2	0.003
3.4	0.003		
3.6	0		

PERMEABILITY TEST RESULTS FOR G3M-92-07X

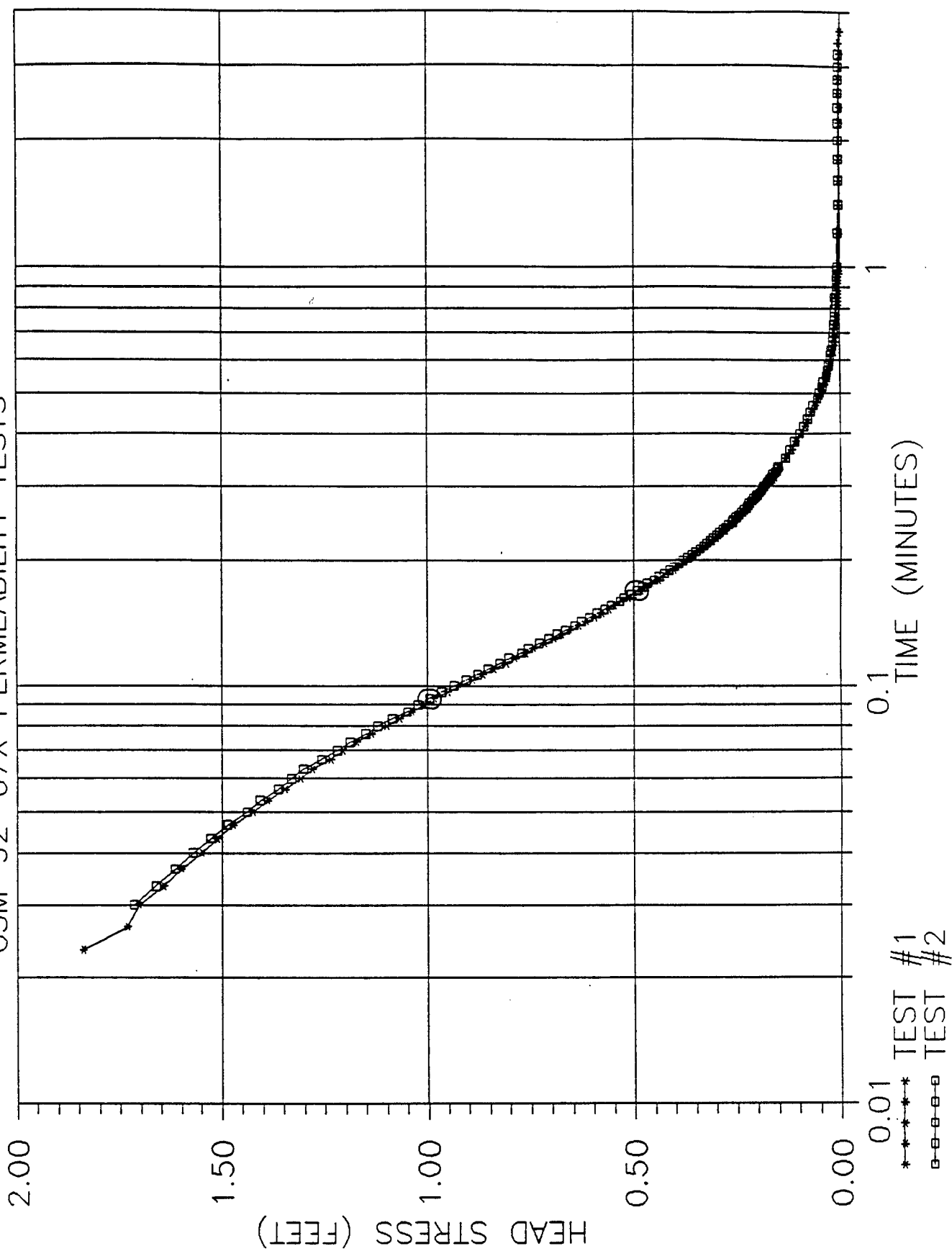
TEST 1

HVORSLEV:
K= 0.0049 CM/SEC
BOUWER & RICE:
K= 0.015 CM/SEC

TEST 2

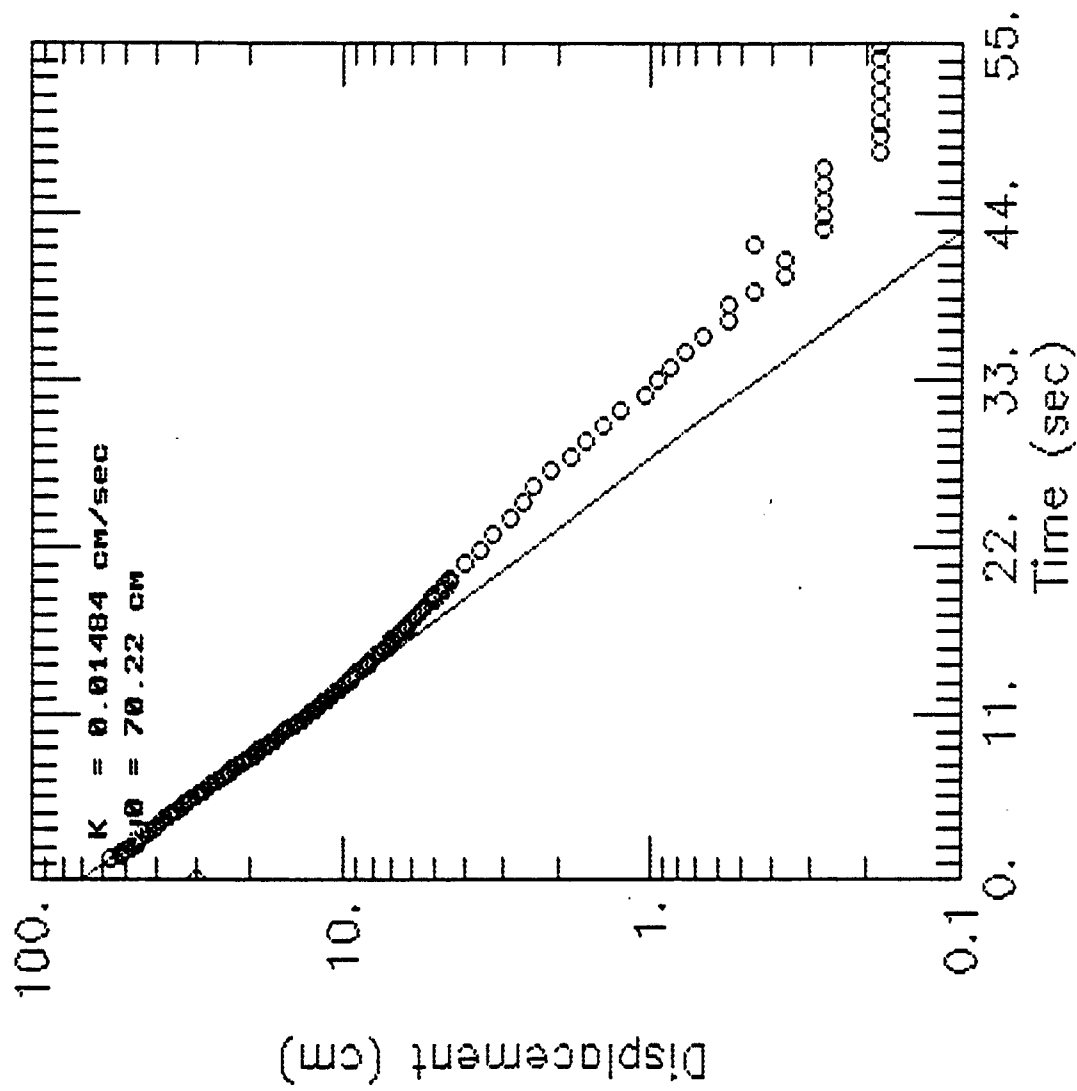
HVORSLEV:
K= 0.0049 CM/SEC
BOUWER & RICE:
K= 0.015 CM/SEC

G3M-92-07X PERMEABILITY TESTS

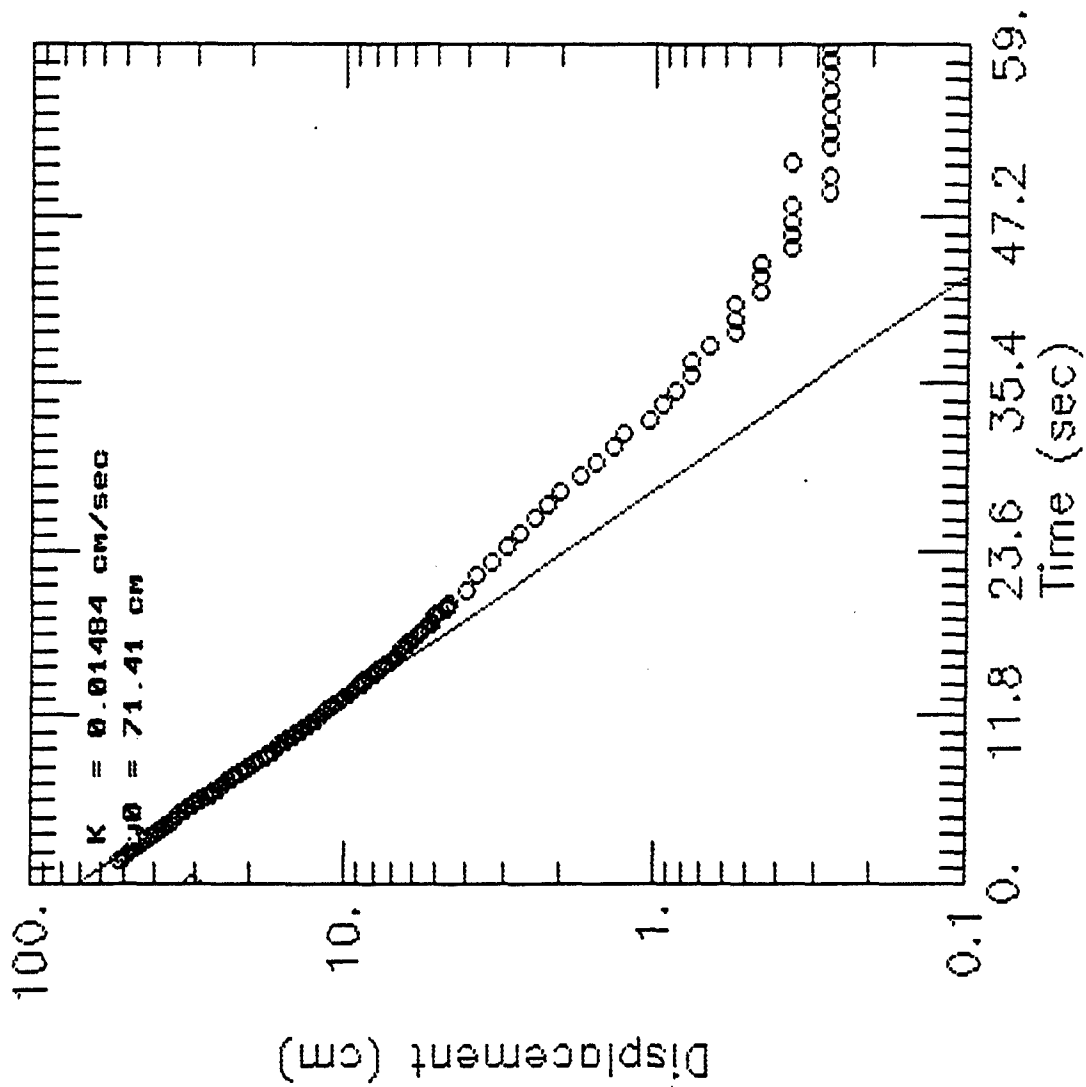




G3M-92-07X PERMEABILITY TEST #1



G3M-92-07X PERMEABILITY TEST #2



07 0851224

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 63M-92-024

SETUP	DATE	BY WHOM
MONITORING WELL ID	63M-92-024 4"	T2 Ruston / D. Pierce
DATE OF TEST	10-02-92	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE1000 C / 1K501332	
TEST #	SEL 4 / 1002	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	2046 DE	
PSIG	10	
SCALE FACTOR	10.001	
OFFSET	-0.034	
INPUT CHANNEL	#1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	27.03 (PVC)	
WELL DEPTH (FT./TOC)	34.10 (PVC)	
XD DEPTH (FT./TOC)	33.10 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	31.10 (PVC)	
TIME OF SLUG PLACEMENT	1255	
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE	0.00	
START TIME OF TEST	1255	
END TIME OF TEST	1259	
NOTES:	SLUG: 3' x 3" PVC BAR STOCK	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	G3M.92-02X 4"	R. RUSTAD
DATE OF TEST	10.07.92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE 1000C / K60A32	
TEST #	SEL 5 / 2 OF 2	
DATA COLLECTION RATE	LOW 1	
TRANSDUCER		
SERIAL #	2646 DE	
PSIG	10	
SCALE FACTOR	10.001	
OFFSET	-0.034	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	27.02	
WELL DEPTH (FT./TOC)	34.10	
XD DEPTH (FT./TOC)	33.10	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	31.10	
TIME OF SLUG PLACEMENT	1305	
TIME OF WL EQUILIBRATION	1305 1306	
NEW XD REFERENCE	0.00	
START TIME OF TEST	1305	
END TIME OF TEST	1308	
NOTES:	SLUG: 3' x 3" PVC BM STOCK	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

CALCULATION OF HYDRAULIC CONDUCTIVITIES USING THE HVORSLEV EQUATION GROUP 3 WELLS

$$K = -\frac{[(\log Ht1 - \log Ht2)/(t1 - t2)]\{(r)^2 \log (L/R)/2L\}}{2.303}$$

WHERE:

t1 = TIME 1 (MINUTES)

t2 = TIME 2 (MINUTES)

Ht1 = HEAD STRESS AT TIME 1 (FEET)

Ht2 = HEAD STRESS AT TIME 2 (FEET)

r = RADIUS OF WELL CASING (FEET)

R = RADIUS OF BOREHOLE (FEET)

L = EFFECTIVE SATURATED LENGTH OF SCREEN (FEET)

WELL	t1	t2	Ht1	Ht2	r	R	L	TEST #	K (FT/MIN)	K (CM/SEC)
G3M-92-01X	1.2	11	0.763	0.35	0.167	0.417	7.2	1	8.3E-05	4.2E-05
G3M-92-01X	1.2	11	0.804	0.363	0.167	0.417	7.2	2	8.4E-05	4.3E-05
G3M-92-02X	0.03	0.08	1.306	0.47	0.167	0.417	6.7	1	2.2E-02	1.1E-02
G3M-92-02X	0.03	0.08	1.344	0.489	0.167	0.417	6.7	2	2.2E-02	1.1E-02
G3M-92-03X	0.0366	0.07	1.189	0.525	0.167	0.417	7.4	1	2.5E-02	1.3E-02
G3M-92-03X	0.0366	0.0766	1.091	0.404	0.167	0.417	7.4	2	2.5E-02	1.3E-02
G3M-92-04X	0.03	0.0533	1.101	0.47	0.167	0.417	6.7	1	4.0E-02	2.0E-02
G3M-92-04X	0.03	0.0533	1.111	0.479	0.167	0.417	6.7	2	3.9E-02	2.0E-02
G3M-92-05X	0.03	0.1	1.546	0.391	0.167	0.417	7.2	1	2.0E-02	1.0E-02
G3M-92-05X	0.0466	0.1066	1.177	0.378	0.167	0.417	7.2	2	2.0E-02	1.0E-02
G3M-92-06X	0.0333	0.08	1.332	0.467	0.167	0.417	6.9	1	2.4E-02	1.2E-02
G3M-92-06X	0.0333	0.08	1.303	0.476	0.167	0.417	6.9	2	2.3E-02	1.2E-02
G3M-92-07X	0.0933	0.17	0.983	0.483	0.167	0.417	7.1	1	9.7E-03	4.9E-03
G3M-92-07X	0.0933	0.17	0.996	0.493	0.167	0.417	7.1	2	9.6E-03	4.9E-03

WELL GSM-92-01X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 6.4 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0.0033	0.471
0.0066	0.298
0.01	0.512
0.0133	0.765
0.0166	0.898
0.02	0.88
0.0233	0.698
0.0266	0.547
0.03	0.426
0.0333	0.323
0.0366	0.248
0.04	0.188
0.0433	0.139
0.0466	0.101
0.05	0.075
0.0533	0.056
0.0566	0.044
0.06	0.031
0.0633	0.025
0.0666	0.018
0.07	0.015
0.0733	0.012
0.0766	0.012
0.08	0.008
0.0833	0.003
0.0866	0.008
0.09	0.006
0.0933	0.003
0.0966	0.003
0.1	0.003
0.1033	0.003
0.1066	0.003
0.11	0.003
0.1133	0.003
0.1166	0.003
0.12	0.003
0.1233	0.003
0.1266	0.003
0.13	0.003
0.1333	0.003
0.1366	0.003
0.14	0.003
0.1433	0.003
0.1466	0.003
0.15	0.003
0.1533	0.003
0.1566	0.003
0.16	0.003
0.1633	0.003
0.1666	0
0.17	0.003
0.1733	0
0.1766	0.003
0.18	0
0.1833	0
0.1866	0
0.19	0.003
0.1933	0
0.1966	0.003
0.2	0
0.2033	0
0.2066	0
0.21	0
0.2133	0
0.2166	0
0.22	0
0.2233	0
0.2266	0
0.23	0
0.2333	0
0.2366	0
0.24	0
0.2433	0
0.2466	0
0.25	0
0.2533	0
0.2566	0
0.26	0
0.2633	0
0.2666	0
0.27	0
0.2733	0
0.2766	0
0.28	0
0.2833	0
0.2866	0
0.29	0
0.2933	0
0.2966	0
0.3	0
0.3033	0
0.3066	0
0.31	0
0.3133	0
0.3166	0
0.32	0
0.3233	0
0.3266	0
0.33	0
0.3333	0
0.35	0
0.3666	0
0.3833	0
0.4	0
0.4166	0
0.4333	0
0.45	0
0.4666	0
0.4833	0
0.5	0
0.5166	0
0.5333	0
0.55	0
0.5666	0

TEST 2
MINUTES

FEET

0	0.003
0.0033	-0.009
0.0066	1.034
0.01	1.084
0.0133	0.698
0.0166	0.717
0.02	0.306
0.0233	0.281
0.0266	0.645
0.03	0.834
0.0333	0.686
0.0366	0.54
0.04	0.423
0.0433	0.322
0.0466	0.243
0.05	0.183
0.0533	0.136
0.0566	0.101
0.06	0.079
0.0633	0.056
0.0666	0.044
0.07	0.031
0.0733	0.025
0.0766	0.018
0.08	0.012
0.0833	0.009
0.0866	0.006
0.09	0.006
0.0933	0.006
0.0966	0.006
0.1	0.006
0.1033	0.003
0.1066	-0.003
0.11	0.003
0.1133	0.003
0.1166	0.003
0.12	0.003
0.1233	0.003
0.1266	0.003
0.13	0.003
0.1333	0.003
0.1366	0.003
0.14	0.003
0.1433	0.003
0.1466	0.003
0.15	0.003
0.1533	0.003
0.1566	0.003
0.16	0.003
0.1633	0.003
0.1666	0.003
0.17	0.003
0.1733	0.003
0.1766	0.003
0.18	0
0.1833	0.003
0.1866	0
0.19	0
0.1933	0.003
0.1966	0
0.2	0
0.2033	0
0.2066	0
0.21	0
0.2133	0
0.2166	0
0.22	0
0.2233	0
0.2266	0
0.23	0
0.2333	0
0.2366	0
0.24	0
0.2433	0
0.2466	0
0.25	0
0.2533	0
0.2566	0
0.26	0
0.2633	0
0.2666	0
0.27	0
0.2733	0
0.2766	0
0.28	0
0.2833	0
0.2866	0
0.29	0
0.2933	0
0.2966	0
0.3	0
0.3033	0
0.3066	0
0.31	0
0.3133	0
0.3166	0
0.32	0
0.3233	0
0.3266	0
0.33	0
0.3333	0
0.35	0
0.3666	0
0.3833	0
0.4	0
0.4166	0
0.4333	0
0.45	0
0.4666	0
0.4833	0
0.5	0
0.5166	0
0.5333	0
0.55	0

0.5833	0
0.6	0
0.6166	0
0.6333	0
0.65	0
0.6666	0
0.6833	0
0.7	0
0.7166	0
0.7333	0
0.75	0
0.7666	0
0.7833	0
0.8	0
0.8166	0
0.8333	0
0.85	0
0.8666	0
0.8833	0
0.9	0
0.9166	0
0.9333	0
0.95	0
0.9666	0
0.9833	0
1	0
1.2	0
1.4	0
1.6	0
1.8	0
2	0
2.2	0
2.4	0
2.6	0
2.8	0
3	0

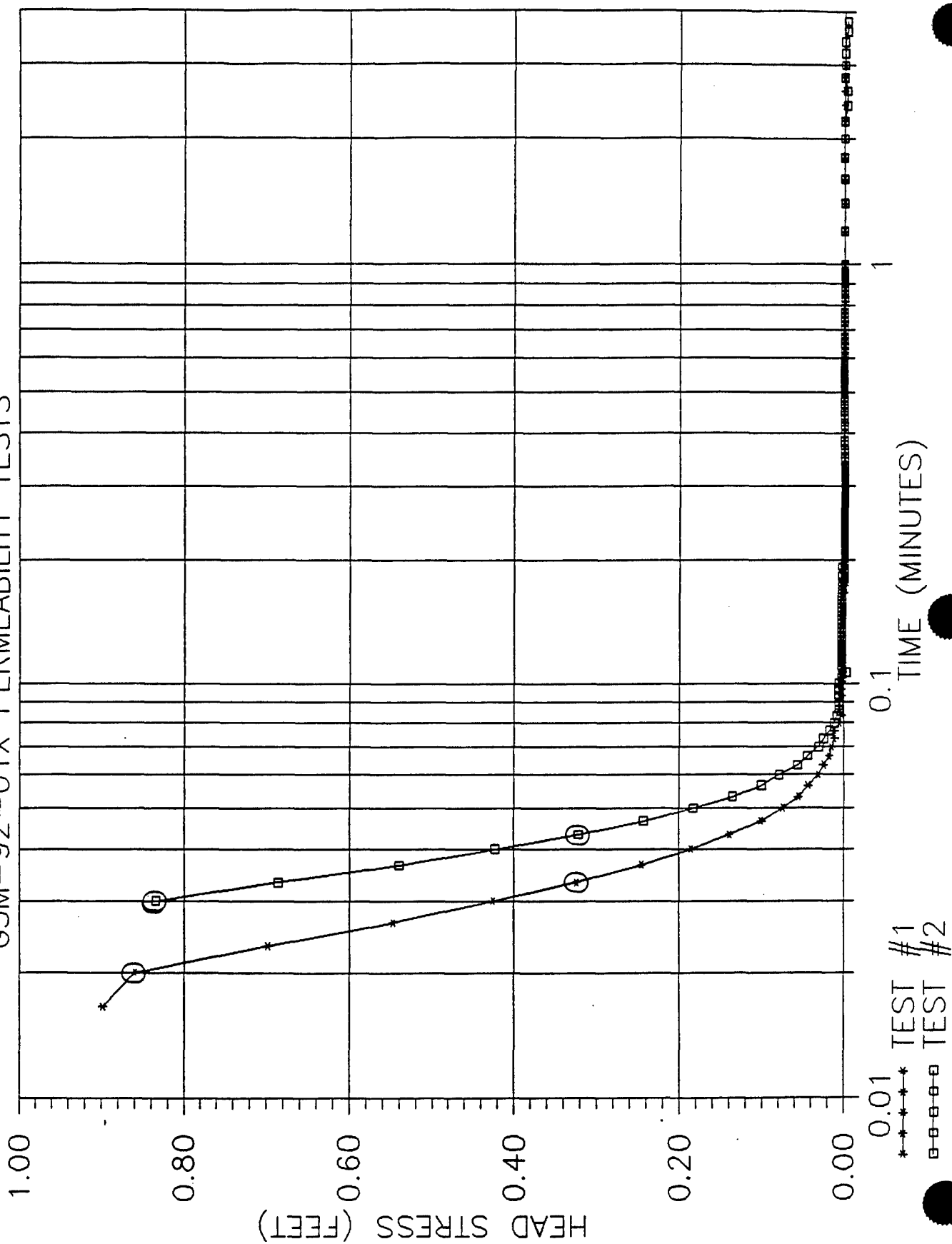
PERMEABILITY TEST RESULTS FOR GSM-02-01X

TEST 1
 HVORSLEV:
 K= 0.042 CM/SEC
 BOUWER & RICE:
 K= 0.14 CM/SEC

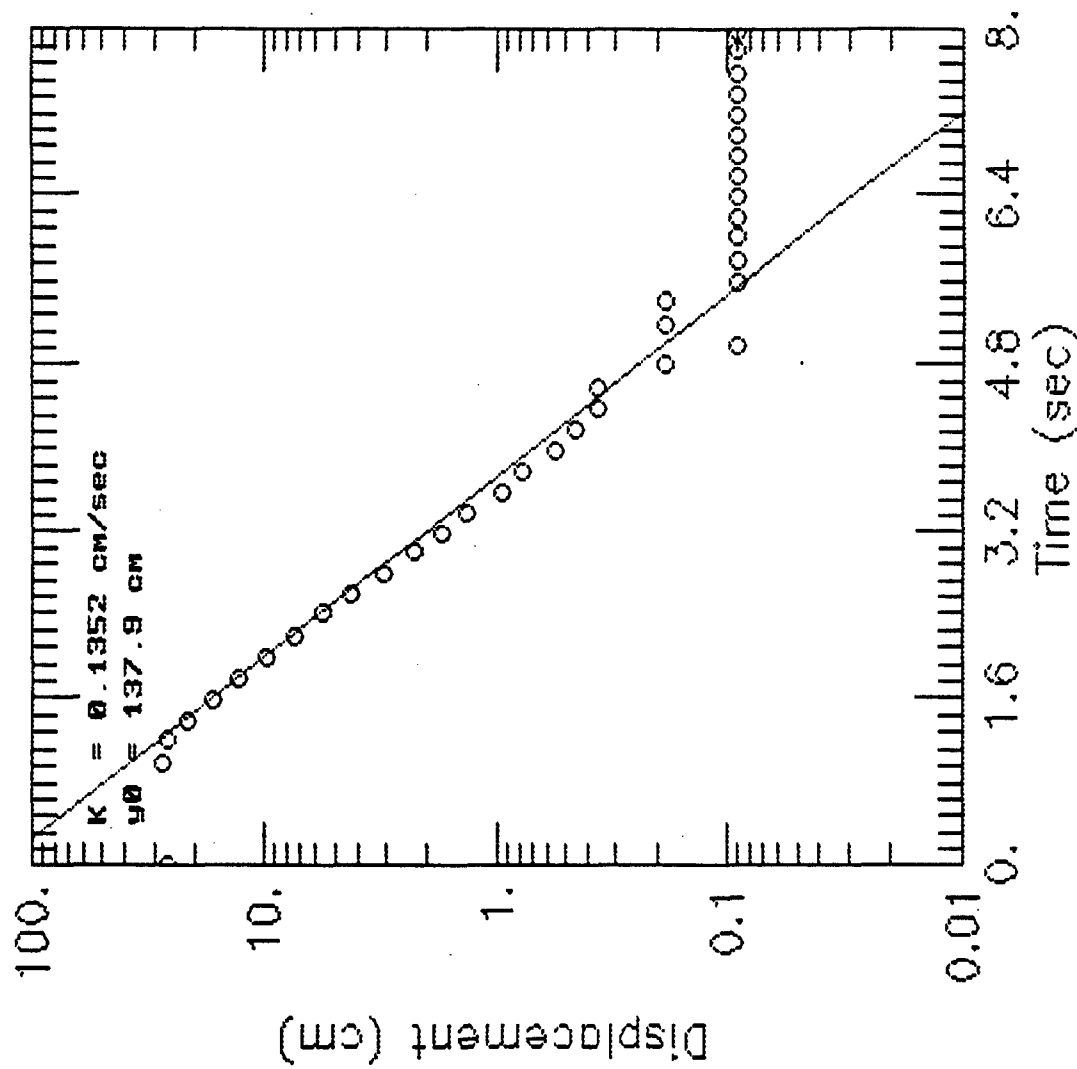
0.5833	0
0.5833	0
0.6	0
0.6166	0
0.6333	0
0.65	0
0.6666	0
0.6833	0
0.7	0
0.7166	0
0.7333	0
0.75	0
0.7666	0
0.7833	0
0.8	0
0.8166	0
0.8333	0
0.85	0
0.8666	0
0.8833	0
0.9	0
0.9166	0
0.9333	0
0.95	0
0.9666	0
0.9833	0
1	0
1.2	0
1.4	0
1.6	0
1.8	0
2	0
2.2	0
2.4	-0.003
2.6	-0.003
2.8	0
3	0
3.2	0
3.4	0
3.6	-0.003
3.8	-0.003

TEST 2
 HVORSLEV:
 K= 0.041 CM/SEC
 BOUWER & RICE:
 K= 0.13 CM/SEC

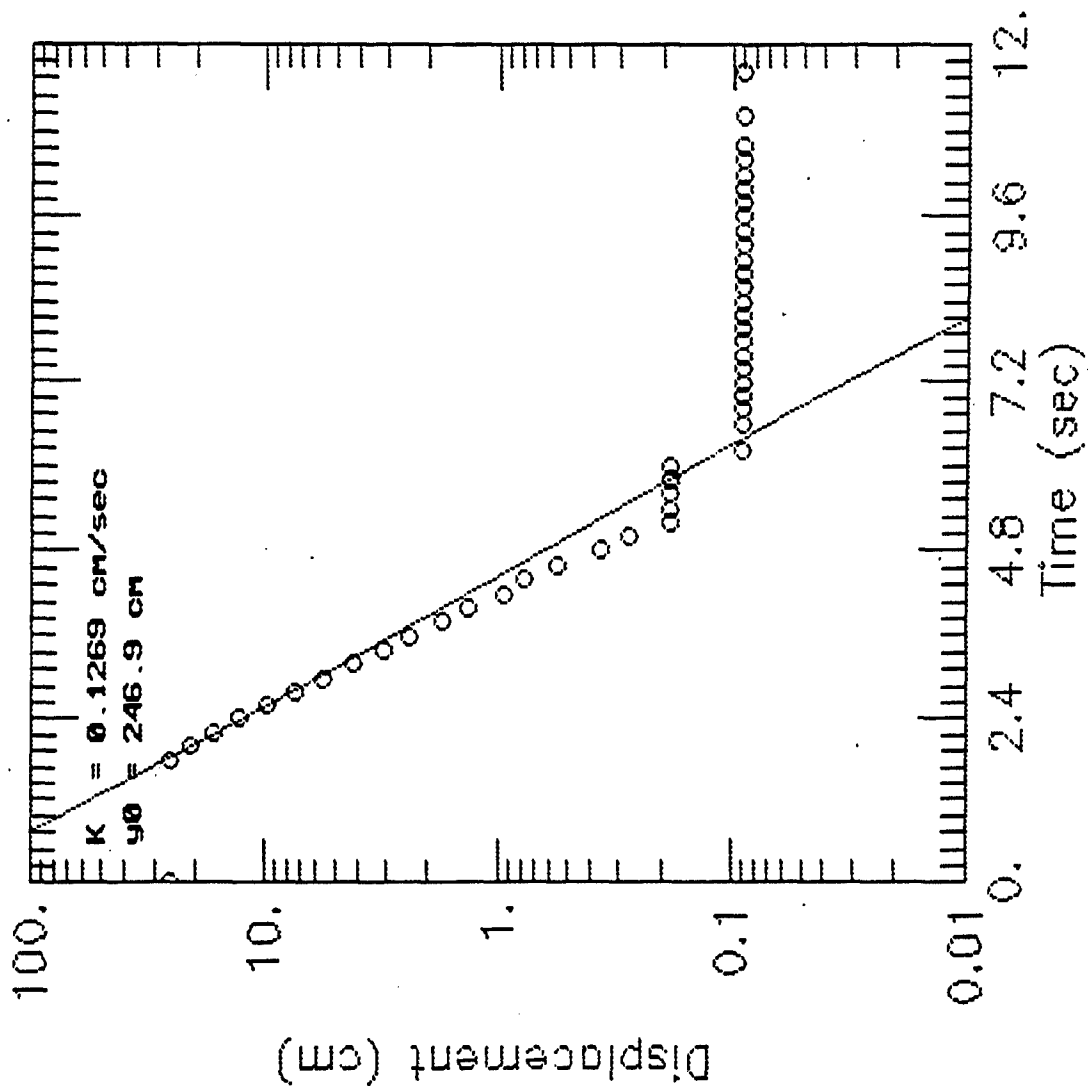
G5M-92-01X PERMEABILITY TESTS



G5M-92-01X PERMEABILITY TEST #1



G5M-92-01X PERMEABILITY TEST #2



AQUIFER TESTING

SETUP

WELL ID	G-5M-92-01X
DATE OF TEST	10.05.92
TYPE OF TEST	SLUG OUT / RISING MUD
HERMIT TYPE / SERIAL #	
TEST #	#6 SEL 6
DATA COLLECTION RATE	LOG

DUCER

SERIAL #	
PSIG	
SCALE FACTOR	
OFFSET	
INPUT CHANNEL	

TEST DATA

INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	34.94 (PVC) 35.12 (TOC)
WELL DEPTH (FT/TOC)	41.38 (PVC) 41.58 (TOC)
XD DEPTH (FT/TOC)	40.5' (PVC)
INITIAL XD REFERENCE	0.0
SLUG DEPTH (FT/TOC)	
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	

NOTES: TEST 1 OF 2

R. RUSTAD D. PIERCE

AQUIFER TESTING	
SETUP	
WELL ID	G5M-92-01X
DATE OF TEST	10-05-92
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	
TEST #	# 7 SEL 7
DATA COLLECTION RATE	100
DUCER	
SERIAL #	
PSIG	
SCALE FACTOR	
OFFSET	
INPUT CHANNEL	
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	34.94 (PVC)
WELL DEPTH (FT/TOC)	41.38 (PVC)
XD DEPTH (FT/TOC)	40.5' (PVC)
INITIAL XD REFERENCE	
SLUG DEPTH (FT/TOC)	
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: COMPLETED 1000	

WELL GSM-02-02X

WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 6.3 FT. BORING DIAMETER = 0.833 FT

TEST 1 MINUTES	FEET	TEST 2 MINUTES	FEET	TEST 3 MINUTES	FEET
0	1.505	0	0.322	0	1.182
0.0033	1.094	0.0033	0.366	0.0033	2.644
0.0066	2.236	0.0066	0.531	0.0066	2.53
0.01	1.815	0.01	0.338	0.01	2.476
0.0133	1.862	0.0133	0.774	0.0133	2.451
0.0166	1.805	0.0166	0.807	0.0166	2.4
0.02	1.764	0.02	0.892	0.02	2.353
0.0233	1.726	0.0233	0.385	0.0233	2.321
0.0266	1.685	0.0266	1.072	0.0266	2.277
0.03	1.65	0.03	0.876	0.03	2.255
0.0333	1.613	0.0333	0.215	0.0333	2.213
0.0366	1.571	0.0366	1.037	0.0366	2.176
0.04	1.543	0.04	0.708	0.04	2.15
0.0433	1.508	0.0433	1.233	0.0433	2.122
0.0466	1.473	0.0466	1.018	0.0466	2.09
0.05	1.445	0.05	0.433	0.05	2.055
0.0533	1.416	0.0533	0.809	0.0533	2.03
0.0566	1.385	0.0566	0.866	0.0566	2.005
0.06	1.353	0.06	1.366	0.06	1.986
0.0633	1.328	0.0633	0.818	0.0633	1.951
0.0666	1.296	0.0666	0.474	0.0666	1.922
0.07	1.271	0.07	0.866	0.07	1.9
0.0733	1.242	0.0733	0.907	0.0733	1.881
0.0766	1.214	0.0766	1.018	0.0766	1.843
0.08	1.186	0.08	0.844	0.08	1.824
0.0833	1.167	0.0833	0.246	0.0833	1.805
0.0866	1.141	0.0866	0.717	0.0866	1.777
0.09	1.116	0.09	0.654	0.09	1.755
0.0933	1.094	0.0933	0.512	0.0933	1.733
0.0966	1.069	0.0966	0.49	0.0966	1.711
0.1	1.046	0.1	0.48	0.1	1.688
0.1033	1.021	0.1033	0.458	0.1033	1.663
0.1066	1.002	0.1066	0.414	0.1066	1.644
0.11	0.98	0.11	0.395	0.11	1.622
0.1133	0.958	0.1133	0.379	0.1133	1.603
0.1166	0.936	0.1166	0.36	0.1166	1.581
0.12	0.917	0.12	0.338	0.12	1.562
0.1233	0.898	0.1233	0.322	0.1233	1.54
0.1266	0.878	0.1266	0.306	0.1266	1.521
0.13	0.857	0.13	0.29	0.13	1.502
0.1333	0.836	0.1333	0.278	0.1333	1.48
0.1366	0.822	0.1366	0.265	0.1366	1.467
0.14	0.8	0.14	0.253	0.14	1.442
0.1433	0.784	0.1433	0.24	0.1433	1.42
0.1466	0.765	0.1466	0.23	0.1466	1.401
0.15	0.749	0.15	0.221	0.15	1.388
0.1533	0.73	0.1533	0.211	0.1533	1.369
0.1566	0.714	0.1566	0.205	0.1566	1.35
0.16	0.695	0.16	0.196	0.16	1.334
0.1633	0.68	0.1633	0.186	0.1633	1.315
0.1666	0.664	0.1666	0.18	0.1666	1.296
0.17	0.651	0.17	0.173	0.17	1.277
0.1733	0.635	0.1733	0.167	0.1733	1.261
0.1766	0.619	0.1766	0.161	0.1766	1.246
0.18	0.604	0.18	0.154	0.18	1.23
0.1833	0.588	0.1833	0.151	0.1833	1.211
0.1866	0.581	0.1866	0.145	0.1866	1.195
0.19	0.559	0.19	0.142	0.19	1.179
0.1933	0.553	0.1933	0.136	0.1933	1.163
0.1966	0.534	0.1966	0.132	0.1966	1.167
0.2	0.525	0.2	0.129	0.2	1.132
0.2033	0.509	0.2033	0.126	0.2033	1.116
0.2066	0.496	0.2066	0.123	0.2066	1.1
0.21	0.487	0.21	0.117	0.21	1.084
0.2133	0.474	0.2133	0.117	0.2133	1.069
0.2166	0.461	0.2166	0.113	0.2166	1.056
0.22	0.449	0.22	0.11	0.22	1.04
0.2233	0.439	0.2233	0.107	0.2233	1.027
0.2266	0.43	0.2266	0.104	0.2266	1.012
0.23	0.417	0.23	0.101	0.23	0.996
0.2333	0.408	0.2333	0.101	0.2333	0.983
0.2366	0.398	0.2366	0.096	0.2366	0.97
0.24	0.385	0.24	0.094	0.24	0.955
0.2433	0.376	0.2433	0.094	0.2433	0.942
0.2466	0.37	0.2466	0.091	0.2466	0.929
0.25	0.36	0.25	0.091	0.25	0.914
0.2533	0.351	0.2533	0.086	0.2533	0.901
0.2566	0.341	0.2566	0.086	0.2566	0.886
0.26	0.332	0.26	0.085	0.26	0.876
0.2633	0.319	0.2633	0.085	0.2633	0.863
0.2666	0.313	0.2666	0.082	0.2666	0.853
0.27	0.306	0.27	0.082	0.27	0.838
0.2733	0.3	0.2733	0.079	0.2733	0.826
0.2766	0.294	0.2766	0.079	0.2766	0.815
0.28	0.281	0.28	0.079	0.28	0.803
0.2833	0.275	0.2833	0.075	0.2833	0.79
0.2866	0.268	0.2866	0.075	0.2866	0.781
0.29	0.262	0.29	0.072	0.29	0.766
0.2933	0.256	0.2933	0.072	0.2933	0.759
0.2966	0.246	0.2966	0.072	0.2966	0.746
0.3	0.24	0.3	0.069	0.3	0.736
0.3033	0.234	0.3033	0.069	0.3033	0.724
0.3066	0.227	0.3066	0.069	0.3066	0.714
0.31	0.221	0.31	0.069	0.31	0.705
0.3133	0.215	0.3133	0.066	0.3133	0.695
0.3166	0.208	0.3166	0.066	0.3166	0.683
0.32	0.205	0.32	0.066	0.32	0.673
0.3233	0.196	0.3233	0.063	0.3233	0.664
0.3266	0.192	0.3266	0.063	0.3266	0.657
0.33	0.186	0.33	0.063	0.33	0.645
0.3333	0.183	0.3333	0.06	0.3333	0.635
0.35	0.154	0.35	0.056	0.35	0.586
0.3666	0.132	0.3666	0.053	0.3666	0.547
0.3833	0.11	0.3833	0.05	0.3833	0.509
0.4	0.091	0.4	0.072	0.4	0.471
0.4166	0.075	0.4166	0.047	0.4166	0.439
0.4333	0.063	0.4333	0.047	0.4333	0.408
0.45	0.05	0.45	0.044	0.45	0.382
0.4666	0.037	0.4666	0.044	0.4666	0.357
0.4833	0.028	0.4833	0.041	0.4833	0.332
0.5	0.018	0.5	0.037	0.5	0.309
0.5166	0.012	0.5166	0.037	0.5166	0.29
0.5333	0.006	0.5333	0.037	0.5333	0.271
0.55	0	0.55	0.034	0.55	0.256

0.5666	-0.006
0.5833	-0.012
0.6	-0.015
0.6166	-0.022
0.6333	-0.025
0.65	-0.028
0.6666	-0.031
0.6833	-0.034
0.7	-0.037
0.7166	-0.037
0.7333	-0.041
0.75	-0.044
0.7666	-0.047
0.7833	-0.047
0.8	-0.047
0.8166	-0.05
0.8333	-0.053
0.85	-0.053
0.8666	-0.056
0.8833	-0.056
0.9	-0.06
0.9166	-0.06
0.9333	-0.06
0.95	-0.06
0.9666	-0.063
0.9833	-0.063
1	-0.06
1.2	-0.069
1.4	-0.075
1.6	-0.072
1.8	-0.075
2	-0.075
2.2	-0.075
2.4	-0.079
2.6	-0.075
2.8	-0.079
3	-0.075
3.2	-0.075
3.4	-0.079
3.6	-0.079
3.8	-0.079
4	-0.075
4.2	-0.079
4.4	-0.079
4.6	-0.079
4.8	-0.079
5	-0.079
5.2	-0.079
5.4	-0.075
5.6	-0.075
5.8	-0.079
6	-0.079
6.2	-0.075
6.4	-0.079

PERMEABILITY TEST RESULTS FOR GSM-02-02X

TEST 1
 HVORSLEV:
 K= 0.0042 CM/SEC
 BOUWER & RICE:
 K= 0.013 CM/SEC

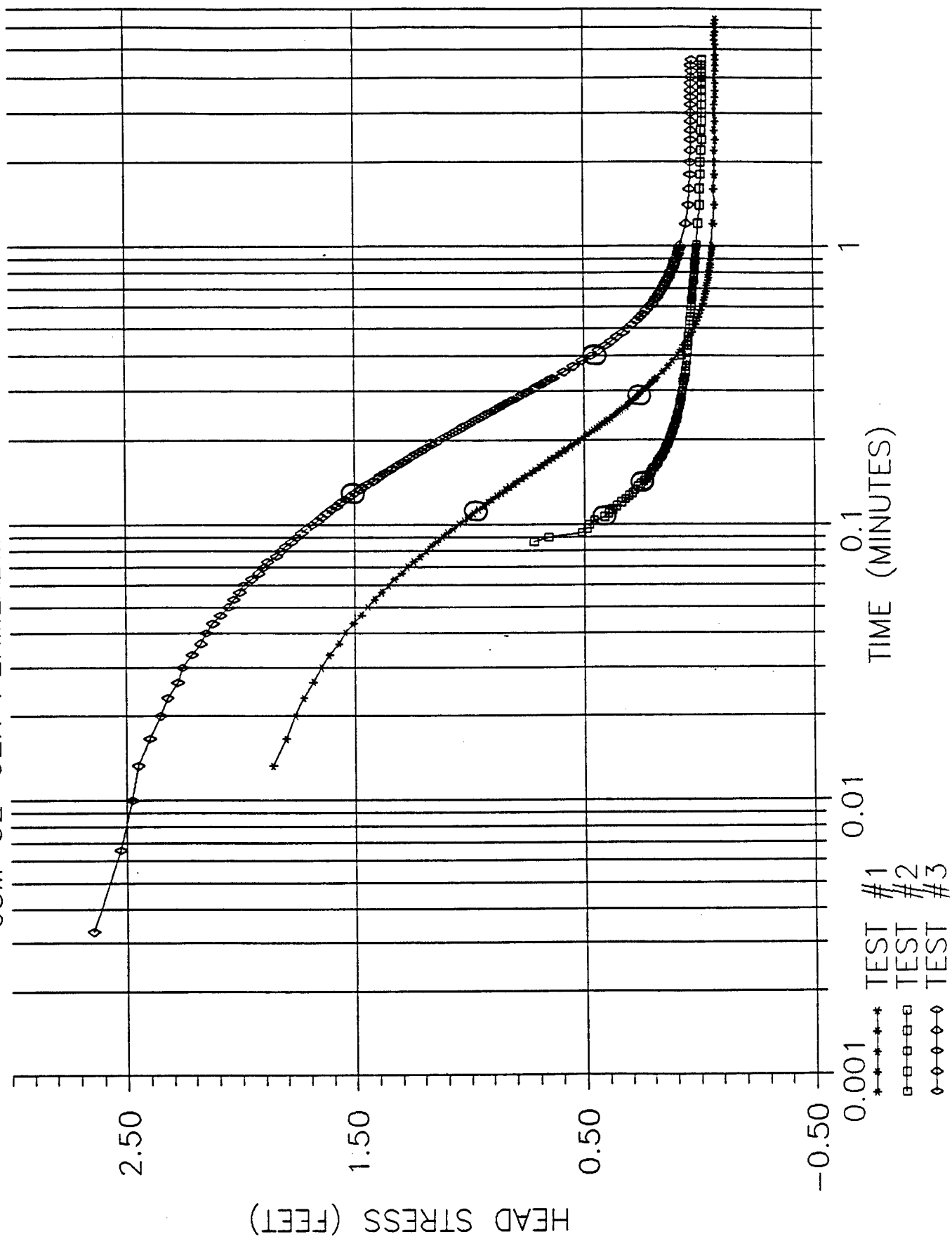
0.5666	0.031
0.5833	0.031
0.6	0.028
0.6166	0.028
0.6333	0.028
0.65	0.025
0.6666	0.025
0.6833	0.025
0.7	0.022
0.7166	0.022
0.7333	0.022
0.75	0.015
0.7666	0.018
0.7833	0.015
0.8	0.015
0.8166	0.012
0.8333	0.012
0.85	0.012
0.8666	0.012
0.8833	0.009
0.9	0.009
0.9166	0.008
0.9333	0.008
0.95	0.008
0.9666	0.008
0.9833	0.008
1	0.003
1.2	-0.003
1.4	-0.012
1.6	-0.012
1.8	-0.015
2	-0.015
2.2	-0.018
2.4	-0.022
2.6	-0.018
2.8	-0.022
3	-0.022
3.2	-0.022
3.4	-0.022
3.6	-0.022
3.8	-0.022
4	-0.022
4.2	-0.022
4.4	-0.022
4.6	-0.022

TEST 2
 HVORSLEV:
 K= 0.0066 CM/SEC
 BOUWER & RICE:
 K= 0.026 CM/SEC

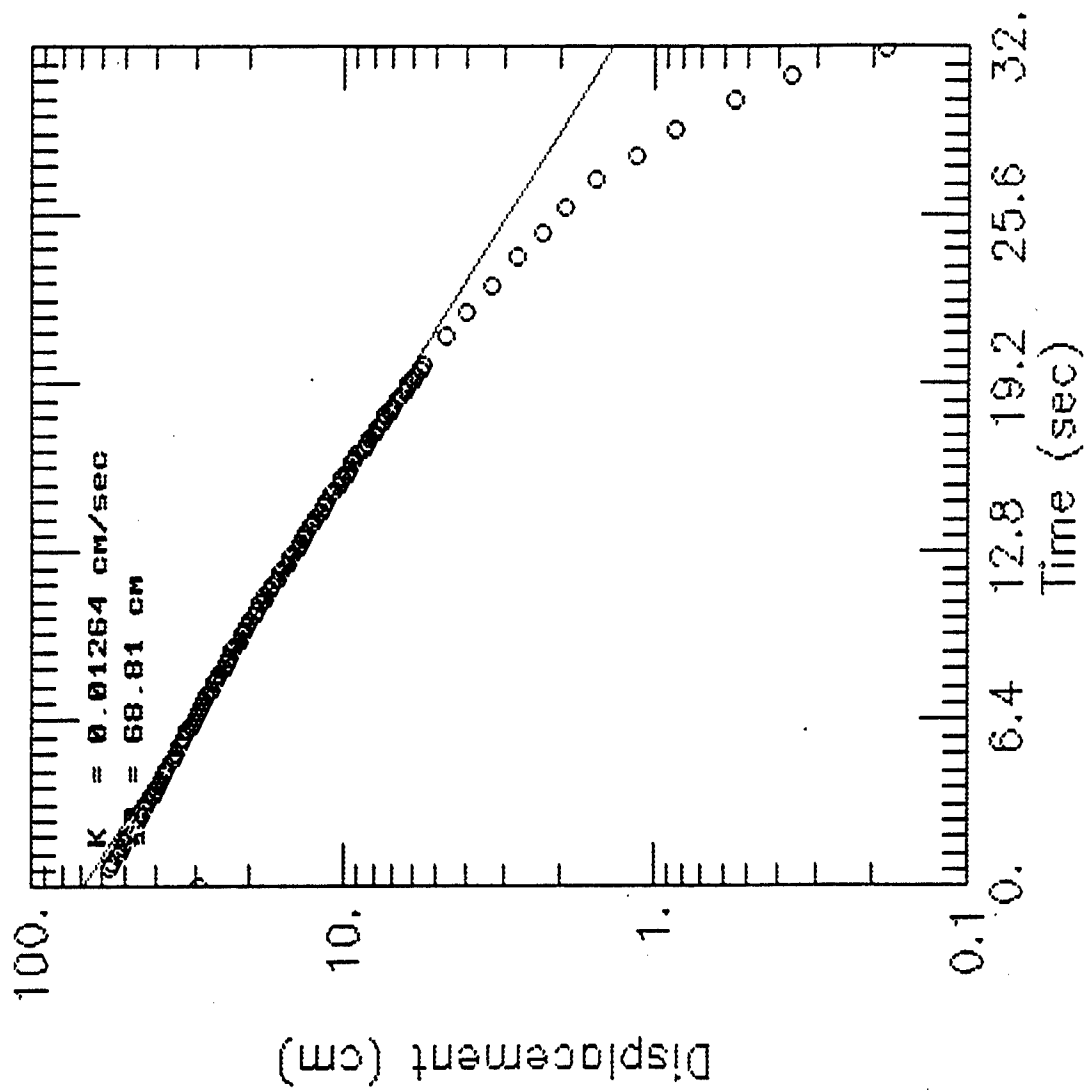
0.5666	0.24
0.5833	0.227
0.6	0.211
0.6166	0.199
0.6333	0.189
0.65	0.18
0.6666	0.17
0.6833	0.164
0.7	0.154
0.7166	0.148
0.7333	0.142
0.75	0.136
0.7666	0.129
0.7833	0.123
0.8	0.12
0.8166	0.113
0.8333	0.107
0.85	0.104
0.8666	0.101
0.8833	0.098
0.9	0.094
0.9166	0.088
0.9333	0.085
0.95	0.082
0.9666	0.079
0.9833	0.075
1	0.075
1.2	0.05
1.4	0.037
1.6	0.034
1.8	0.028
2	0.028
2.2	0.025
2.4	0.025
2.6	0.025
2.8	0.025
3	0.025
3.2	0.025
3.4	0.025
3.6	0.025
3.8	0.025
4	0.025
4.2	0.022
4.4	0.025
4.6	0.022

TEST 3
 HVORSLEV:
 K= 0.0025 CM/SEC
 BOUWER & RICE:
 K= 0.0073 CM/SEC

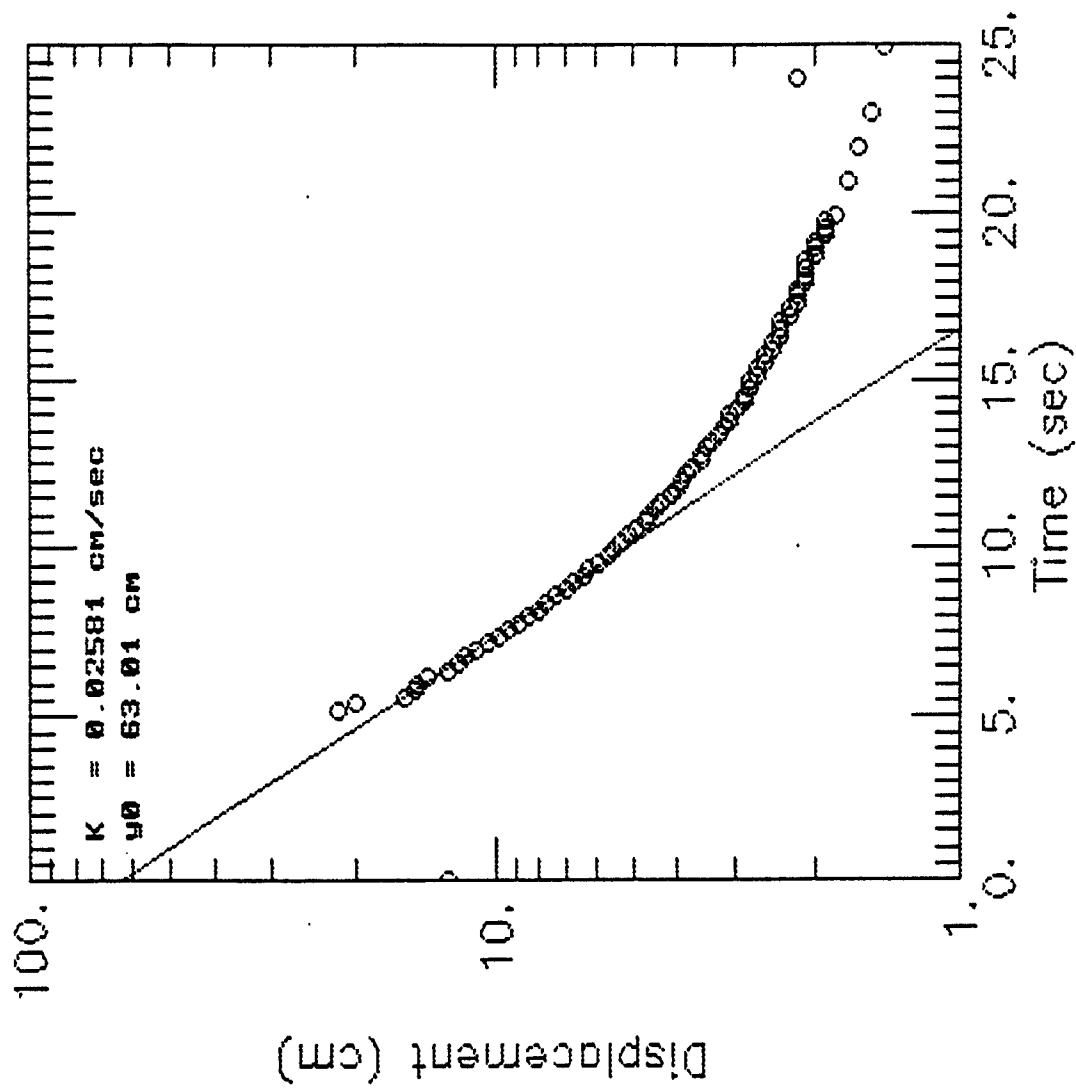
G5M-92-02X PERMEABILITY TESTS



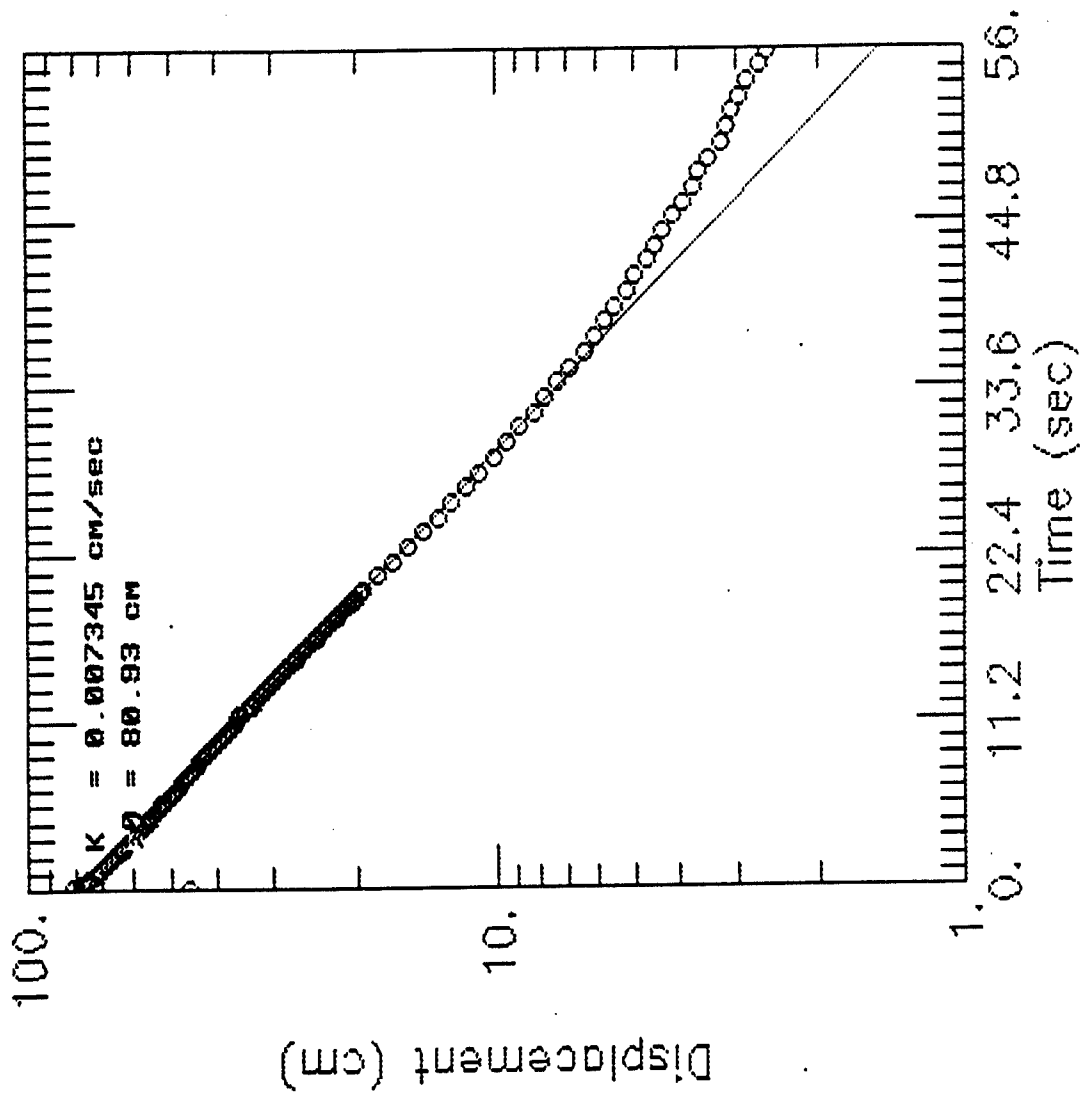
G5M-92-02X PERMEABILITY TEST #1



G5M-92-02X PERMEABILITY TEST #2



G5M-92-02X PERMEABILITY TEST #3



AQUIFER TESTING	
SETUP	
WELL ID	65M-92-02X
DATE OF TEST	10-5-92
TYPE OF TEST	FALLING ^(RR) HEAD RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000C / 1KCO1732
TEST #	# 0
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	2046 DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	- 0.034
INPUT CHANNEL	# 1
TEST DATA	
INPUT MODE (TOC/SUR)	^(RR) TOC SUR
STATIC WATER LEVEL (FT/TOC)	19.27
WELL DEPTH (FT/TOC)	25.56
XD DEPTH (FT/TOC)	24.5
INITIAL XD REFERENCE	0.0
SLUG DEPTH (FT/TOC)	- 24.0
TIME OF SLUG PLACEMENT	-
TIME OF WL EQUILIBRATION	-
NEW XD REFERENCE	-
START TIME OF TEST	1220
END TIME OF TEST	1226
NOTES: APPARENTLY SOME SEDIMENT WAS COLLECTED IN THE BASE OF THE WELL. R. RUSTAD, D. PIERCE, B. RICE TEST #1A	

AQUIFER TESTING	
SETUP	
WELL ID	65M-92-02X
DATE OF TEST	10-05-92
TYPE OF TEST	SLUG IN / FALLING HEAD
HERMIT TYPE / SERIAL #	SE-1000C / 1K601732
TEST #	# 1
DATA COLLECTION RATE	LOG
DUCER	
SERIAL #	
PSIG	
SCALE FACTOR	
OFFSET	
INPUT CHANNEL	
TEST DATA	
INPUT MODE (TOC/SUR)	SUR
STATIC WATER LEVEL (FT/TOC)	19.22
WELL DEPTH (FT/TOC)	
XD DEPTH (FT/TOC)	
INITIAL XD REFERENCE	
SLUG DEPTH (FT/TOC)	
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST #8 AT 02X	

AQUIFER TESTING	
SETUP	
WELL ID	65M-92-02X
DATE OF TEST	10.5.92
TYPE OF TEST	SLUG BUT RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000C
TEST #	SEL # 2
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	
PSIG	
SCALE FACTOR	
OFFSET	
INPUT CHANNEL	
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	19.27
WELL DEPTH (FT/TOC)	
XD DEPTH (FT/TOC)	
INITIAL XD REFERENCE	
SLUG DEPTH (FT/TOC)	
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST C AT 02X	

WELL GSM-02-008

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 4.4 FT, BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	1.635
0.0033	1.021
0.0066	0.961
0.01	1.543
0.0133	1.85
0.0166	1.616
0.02	1.502
0.0233	1.413
0.0266	1.337
0.03	1.265
0.0333	1.169
0.0366	1.122
0.04	1.059
0.0433	1.002
0.0466	0.948
0.05	0.895
0.0533	0.844
0.0566	0.793
0.06	0.746
0.0633	0.696
0.0666	0.657
0.07	0.61
0.0733	0.575
0.0766	0.537
0.08	0.502
0.0833	0.471
0.0866	0.439
0.09	0.411
0.0933	0.382
0.0966	0.357
0.1	0.335
0.1033	0.309
0.1066	0.287
0.11	0.266
0.1133	0.249
0.1166	0.23
0.12	0.215
0.1233	0.199
0.1266	0.186
0.13	0.173
0.1333	0.158
0.1366	0.148
0.14	0.136
0.1433	0.126
0.1466	0.117
0.15	0.107
0.1533	0.101
0.1566	0.094
0.16	0.085
0.1633	0.079
0.1666	0.075
0.17	0.069
0.1733	0.063
0.1766	0.06
0.18	0.053
0.1833	0.05
0.1866	0.047
0.19	0.044
0.1933	0.041
0.1966	0.037
0.2	0.034
0.2033	0.031
0.2066	0.028
0.21	0.028
0.2133	0.025
0.2166	0.025
0.22	0.022
0.2233	0.022
0.2266	0.018
0.23	0.018
0.2333	0.015
0.2366	0.015
0.24	0.012
0.2433	0.012
0.2466	0.012
0.25	0.012
0.2533	0.009
0.2566	0.009
0.26	0.009
0.2633	0.009
0.2666	0.006
0.27	0.006
0.2733	0.006
0.2766	0.006
0.28	0.006
0.2833	0.006
0.2866	0.006
0.29	0.003
0.2933	0.003
0.2966	0.003
0.3	0.003
0.3033	0.003
0.3066	0.003
0.31	0.003
0.3133	0.003
0.3166	0.003
0.32	0.003
0.3233	0.003
0.3266	0.003
0.33	0
0.3333	0.003
0.35	0
0.3666	0
0.3833	0
0.4	0
0.4166	0
0.4333	0
0.45	0
0.4666	0
0.4833	0
0.5	0
0.5166	0
0.5333	0
0.55	0

TEST 2
MINUTES

FEET

0	0
0.0033	-0.022
0.0066	1.578
0.01	1.106
0.0133	0.872
0.0166	1.543
0.02	1.362
0.0233	1.315
0.0266	1.236
0.03	1.163
0.0333	1.091
0.0366	1.024
0.04	0.961
0.0433	0.904
0.0466	0.85
0.05	0.797
0.0533	0.746
0.0566	0.695
0.06	0.651
0.0633	0.607
0.0666	0.562
0.07	0.525
0.0733	0.487
0.0766	0.455
0.08	0.42
0.0833	0.392
0.0866	0.363
0.09	0.338
0.0933	0.309
0.0966	0.287
0.1	0.265
0.1033	0.246
0.1066	0.227
0.11	0.211
0.1133	0.196
0.1166	0.18
0.12	0.167
0.1233	0.151
0.1266	0.142
0.13	0.129
0.1333	0.12
0.1366	0.11
0.14	0.101
0.1433	0.094
0.1466	0.088
0.15	0.082
0.1533	0.075
0.1566	0.069
0.16	0.063
0.1633	0.06
0.1666	0.053
0.17	0.05
0.1733	0.047
0.1766	0.041
0.18	0.037
0.1833	0.037
0.1866	0.034
0.19	0.031
0.1933	0.028
0.1966	0.028
0.2	0.025
0.2033	0.022
0.2066	0.022
0.21	0.018
0.2133	0.018
0.2166	0.018
0.22	0.015
0.2233	0.015
0.2266	0.012
0.23	0.012
0.2333	0.012
0.2366	0.012
0.24	0.009
0.2433	0.009
0.2466	0.009
0.25	0.009
0.2533	0.009
0.2566	0.006
0.26	0.006
0.2633	0.006
0.2666	0.006
0.27	0.006
0.2733	0.006
0.2766	0.006
0.28	0.006
0.2833	0.006
0.2866	0.006
0.29	0.003
0.2933	0.003
0.2966	0.003
0.3	0.003
0.3033	0.003
0.3066	0.003
0.31	0.003
0.3133	0.003
0.3166	0.003
0.32	0.003
0.3233	0.003
0.3266	0.003
0.33	0.003
0.3333	0.003
0.35	0.003
0.3666	0.003
0.3833	0.003
0.4	0.003
0.4166	0.003
0.4333	0.003
0.45	0.003
0.4666	0.003
0.4833	0.003
0.5	0.003
0.5166	0.003
0.5333	0.003
0.55	0.003

0.5000	0
0.5833	0
0.6	0
0.6166	0
0.6333	0
0.65	0
0.6666	0
0.6833	0
0.7	0
0.7166	0
0.7333	0
0.75	0
0.7666	0
0.7833	0
0.8	0
0.8166	0
0.8333	0
0.85	0
0.8666	0
0.8833	0
0.9	0
0.9166	0
0.9333	0
0.95	0
0.9666	0
0.9833	0
1	0
1.2	0
1.4	0
1.6	-0.003
1.8	-0.003
2	-0.003
2.2	-0.003
2.4	-0.003
2.6	-0.003
2.8	-0.003
3	-0.003
3.2	-0.003

PERMEABILITY TEST RESULTS FOR GSM-92-03B

TEST 1

HVORSLEV:

K= 0.014 CM/SEC

BOUWER & RICE:

K= 0.040 CM/SEC

0.5000	0.003
0.5833	0.003
0.6	0.003
0.6166	0.003
0.6333	0.003
0.65	0.003
0.6666	0.003
0.6833	0.003
0.7	0.003
0.7166	0.003
0.7333	0.003
0.75	0.003
0.7666	0.003
0.7833	0.003
0.8	0.003
0.8166	0.003
0.8333	0.003
0.85	0.003
0.8666	0.003
0.8833	0.003
0.9	0.003
0.9166	0.003
0.9333	0.003
0.95	0.003
0.9666	0.003
0.9833	0.003
1	0.003
1.2	0.003
1.4	0
1.6	0

TEST 2

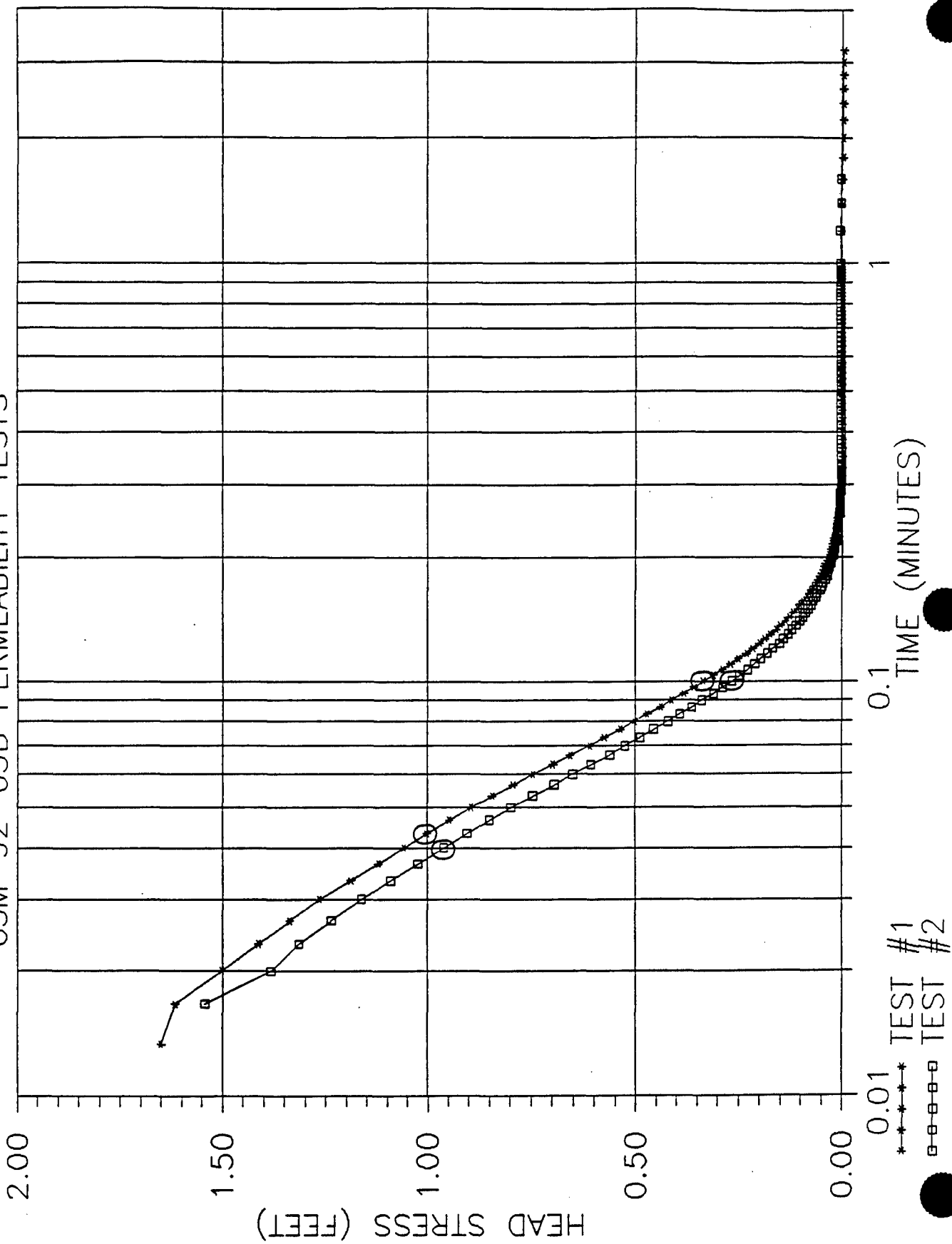
HVORSLEV:

K= 0.015 CM/SEC

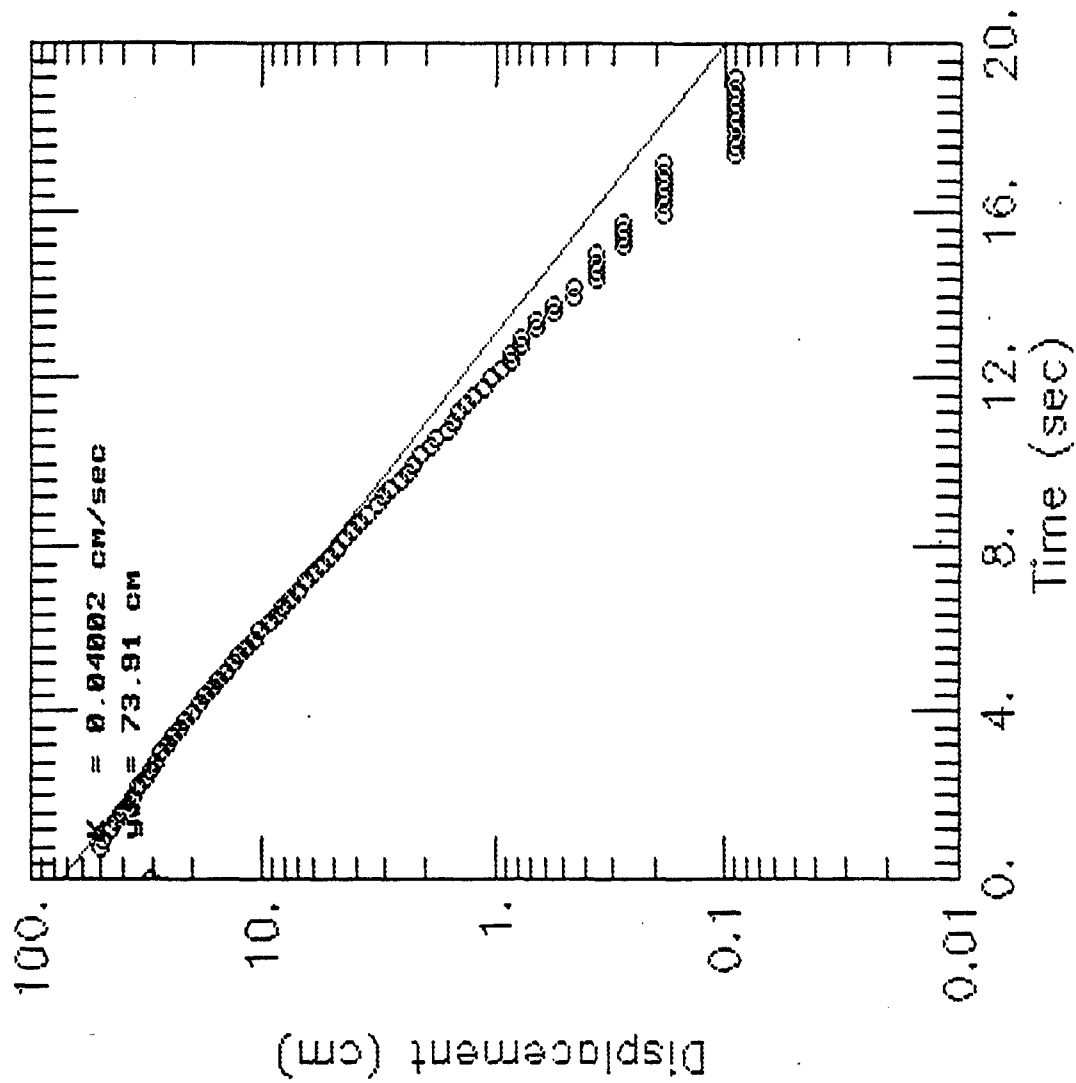
BOUWER & RICE:

K= 0.044 CM/SEC

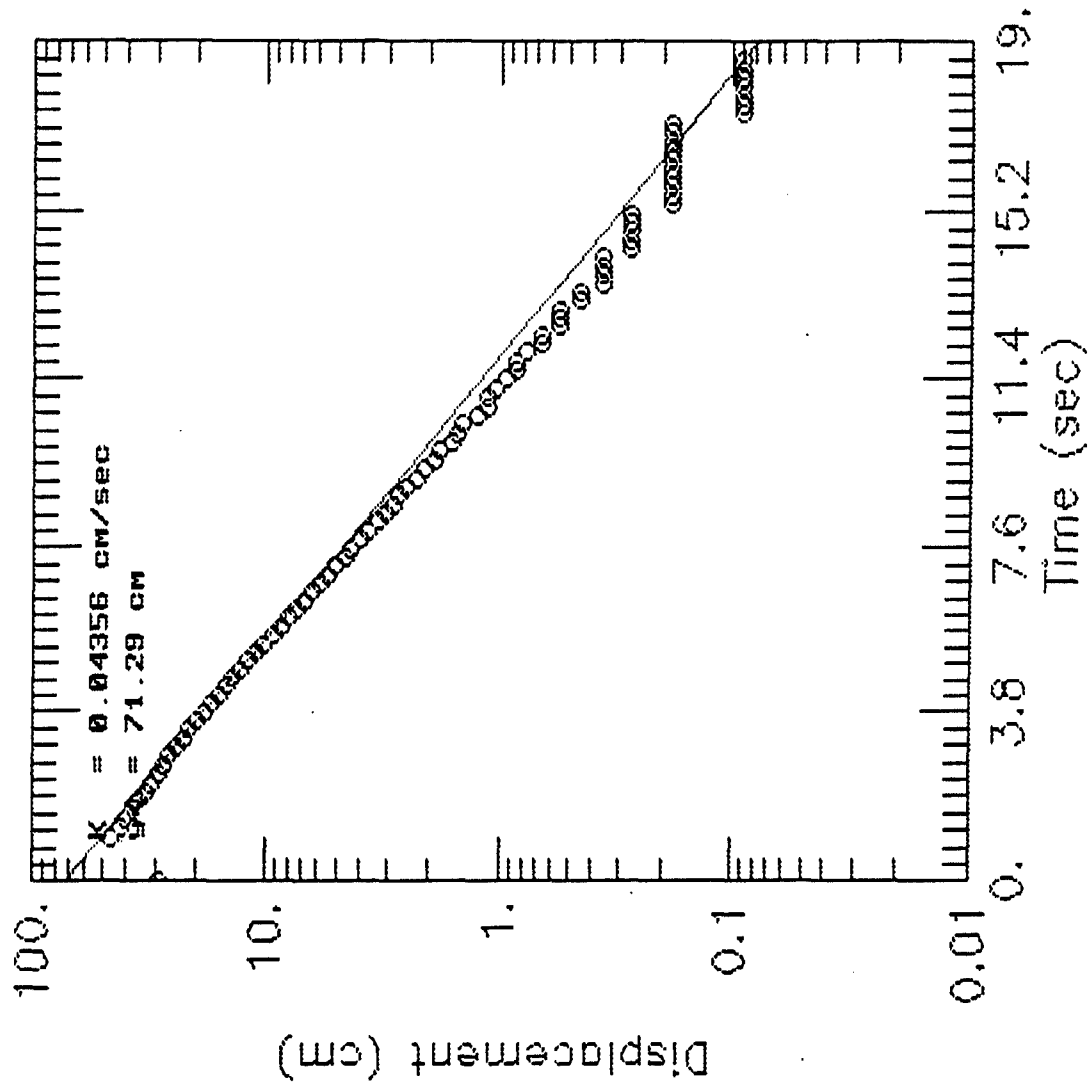
G5M-92-03B PERMEABILITY TESTS



G5M-92-03B PERMEABILITY TEST #1



G5M-92-03B PERMEABILITY TEST #2



AQUIFER TESTING	
SETUP	
WELL ID	65M-92-03B
DATE OF TEST	10.05.92.
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	
TEST #	# 4
DATA COLLECTION RATE	LOW
DUCER	
SERIAL #	
PSIG	
SCALE FACTOR	
OFFSET	
INPUT CHANNEL	
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	34.45 (PIC)
WELL DEPTH (FT/TOC)	
XD DEPTH (FT/TOC)	
INITIAL XD REFERENCE	
SLUG DEPTH (FT/TOC)	
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 2 OF 3	

AQUIFER TESTING	
SETUP	
WELL ID	65M. 92 - 033
DATE OF TEST	10.05.92
TYPE OF TEST	SLUG OUT / RISING Wm
HERMIT TYPE / SERIAL #	
TEST #	#5 SEL 5
DATA COLLECTION RATE	
DUCER	
SERIAL #	
PSIG	
SCALE FACTOR	
OFFSET	
INPUT CHANNEL	
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	34.65 (PVC)
WELL DEPTH (FT/TOC)	
XD DEPTH (FT/TOC)	
INITIAL XD REFERENCE	
SLUG DEPTH (FT/TOC)	
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 3 OF 3	

CALCULATION OF HYDRAULIC CONDUCTIVITIES USING THE HVORSLEV EQUATION
GROUP 5 WELLS

$$K = -\{(\text{LOG } Ht1 - \text{LOG } Ht2)/[t1 - t2]\} \{[(r)^2 \text{ LOG } (L/R)]/2L\}$$

WHERE:

t1 = TIME 1 (MINUTES)

t2 = TIME 2 (MINUTES)

Ht1 = HEAD STRESS AT TIME 1 (FEET)

Ht2 = HEAD STRESS AT TIME 2 (FEET)

r = RADIUS OF WELL CASING (FEET)

R = RADIUS OF BOREHOLE (FEET)

L = EFFECTIVE SATURATED LENGTH OF SCREEN (FEET)

WELL	t1	t2	Ht1	Ht2	r	R	L	TEST #	K (FT/MIN)	K (CM/SEC)
G5M-92-01X	0.02	0.0333	0.86	0.325	0.167	0.417	6.4	1	8.2E-02	4.2E-02
G5M-92-01X	0.03	0.0433	0.834	0.322	0.167	0.417	6.4	2	8.0E-02	4.1E-02
G5M-92-02X	0.1133	0.2933	0.958	0.256	0.167	0.417	6.3	1	8.3E-03	4.2E-03
G5M-92-02X	0.1066	0.1366	0.414	0.265	0.167	0.417	6.3	2	1.7E-02	8.6E-03
G5M-92-02X	0.13	0.4	1.502	0.471	0.167	0.417	6.3	3	4.9E-03	2.5E-03
G5M-92-03B	0.0433	0.1	1.002	0.335	0.167	0.417	4.4	1	2.7E-02	1.4E-02
G5M-92-03B	0.04	0.1	0.961	0.265	0.167	0.417	4.4	2	3.0E-02	1.5E-02

WELL G9M-02-01X

WELL DIAMETER = 0.3125 FT. SATURATED SCREEN LENGTH = 6.5 FT. BORING DIAMETER = 0.833 FT

TEST 1 MINUTES	FEET	TEST 2 MINUTES	FEET
0	-0.003	0	0.003
0.0033	0.003	0.0033	0.003
0.0066	0	0.0066	1.835
0.01	0.866	0.01	1.948
0.0133	2.416	0.0133	0.389
0.0166	0.91	0.0166	1.17
0.02	1.16	0.02	1.815
0.0233	1.125	0.0233	1.799
0.0266	1.954	0.0266	1.802
0.03	1.812	0.03	1.786
0.0333	1.79	0.0333	1.781
0.0366	1.783	0.0366	1.73
0.04	1.752	0.04	1.711
0.0433	1.733	0.0433	1.688
0.0466	1.696	0.0466	1.689
0.05	1.679	0.05	1.641
0.0533	1.666	0.0533	1.625
0.0566	1.631	0.0566	1.638
0.06	1.622	0.06	1.581
0.0633	1.594	0.0633	1.568
0.0666	1.581	0.0666	1.546
0.07	1.556	0.07	1.53
0.0733	1.543	0.0733	1.518
0.0766	1.521	0.0766	1.48
0.08	1.502	0.08	1.48
0.0833	1.483	0.0833	1.451
0.0866	1.464	0.0866	1.407
0.09	1.448	0.09	1.416
0.0933	1.429	0.0933	1.382
0.0966	1.413	0.0966	1.385
0.1	1.394	0.1	1.372
0.1033	1.378	0.1033	1.344
0.1066	1.363	0.1066	1.325
0.11	1.347	0.11	1.347
0.1133	1.328	0.1133	1.309
0.1166	1.312	0.1166	1.293
0.12	1.296	0.12	1.265
0.1233	1.28	0.1233	1.291
0.1266	1.271	0.1266	1.249
0.13	1.252	0.13	1.205
0.1333	1.236	0.1333	1.211
0.1366	1.22	0.1366	1.205
0.14	1.208	0.14	1.17
0.1433	1.192	0.1433	1.167
0.1466	1.179	0.1466	1.148
0.15	1.163	0.15	1.125
0.1533	1.151	0.1533	1.135
0.1566	1.136	0.1566	1.116
0.16	1.122	0.16	1.106
0.1633	1.11	0.1633	1.081
0.1666	1.097	0.1666	1.089
0.17	1.084	0.17	1.082
0.1733	1.072	0.1733	1.056
0.1766	1.059	0.1766	1.034
0.18	1.046	0.18	1.021
0.1833	1.034	0.1833	1.015
0.1866	1.021	0.1866	1.002
0.19	1.008	0.19	0.989
0.1933	0.996	0.1933	0.98
0.1966	0.986	0.1966	0.964
0.2	0.974	0.2	0.955
0.2033	0.961	0.2033	0.942
0.2066	0.948	0.2066	0.929
0.21	0.939	0.21	0.917
0.2133	0.926	0.2133	0.907
0.2166	0.914	0.2166	0.898
0.22	0.904	0.22	0.885
0.2233	0.895	0.2233	0.878
0.2266	0.882	0.2266	0.863
0.23	0.872	0.23	0.853
0.2333	0.86	0.2333	0.841
0.2366	0.85	0.2366	0.831
0.24	0.838	0.24	0.822
0.2433	0.828	0.2433	0.812
0.2466	0.819	0.2466	0.803
0.25	0.808	0.25	0.793
0.2533	0.797	0.2533	0.781
0.2566	0.787	0.2566	0.771
0.26	0.778	0.26	0.762
0.2633	0.768	0.2633	0.755
0.2666	0.759	0.2666	0.746
0.27	0.749	0.27	0.733
0.2733	0.74	0.2733	0.724
0.2766	0.73	0.2766	0.714
0.28	0.721	0.28	0.706
0.2833	0.711	0.2833	0.698
0.2866	0.705	0.2866	0.689
0.29	0.695	0.29	0.68
0.2933	0.686	0.2933	0.673
0.2966	0.676	0.2966	0.664
0.3	0.67	0.3	0.661
0.3033	0.661	0.3033	0.648
0.3066	0.651	0.3066	0.638
0.31	0.645	0.31	0.629
0.3133	0.635	0.3133	0.623
0.3166	0.629	0.3166	0.616
0.32	0.619	0.32	0.607
0.3233	0.613	0.3233	0.6
0.3266	0.604	0.3266	0.591
0.33	0.597	0.33	0.585
0.3333	0.588	0.3333	0.575
0.35	0.547	0.35	0.544
0.3666	0.512	0.3666	0.502

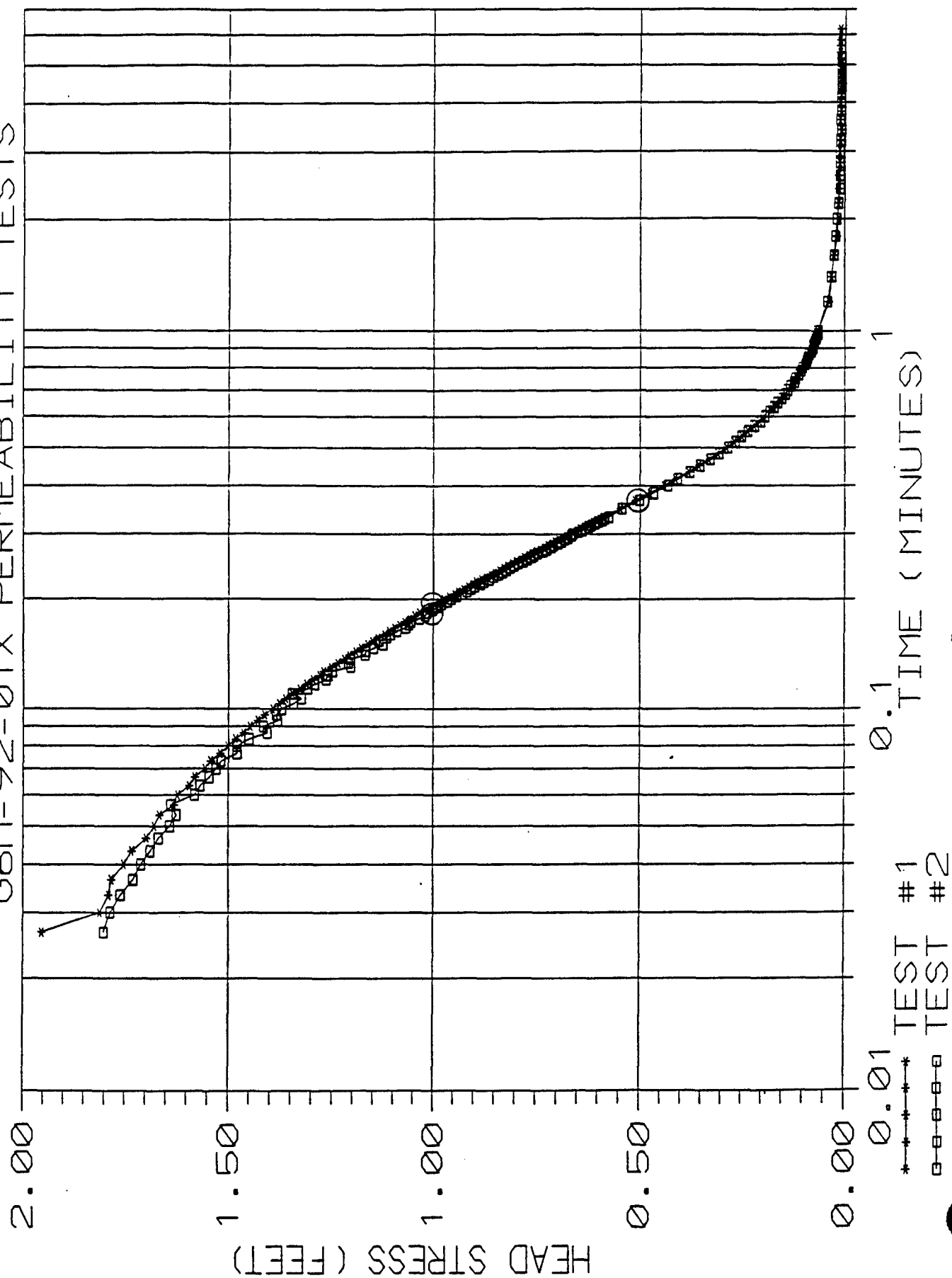
0.3833	0.477
0.4	0.442
0.4166	0.414
0.4333	0.382
0.45	0.357
0.4666	0.332
0.4833	0.306
0.5	0.287
0.5166	0.266
0.5333	0.249
0.55	0.234
0.5666	0.218
0.5833	0.205
0.6	0.192
0.6166	0.18
0.6333	0.17
0.65	0.161
0.6666	0.151
0.6833	0.142
0.7	0.136
0.7166	0.126
0.7333	0.12
0.75	0.113
0.7666	0.11
0.7833	0.104
0.8	0.096
0.8166	0.094
0.8333	0.091
0.85	0.086
0.8666	0.082
0.8833	0.079
0.9	0.079
0.9166	0.075
0.9333	0.072
0.95	0.069
0.9666	0.066
0.9833	0.063
1	0.063
1.2	0.037
1.4	0.031
1.6	0.025
1.8	0.018
2	0.015
2.2	0.015
2.4	0.015
2.6	0.015
2.8	0.012
3	0.012
3.2	0.012
3.4	0.009
3.6	0.012
3.8	0.009
4	0.012
4.2	0.009
4.4	0.009
4.6	0.009
4.8	0.009
5	0.009
5.2	0.012
5.4	0.012
5.6	0.012
5.8	0.012
6	0.012
6.2	0.012

PERMEABILITY TEST RESULTS FOR G6M-92-01X
 HVORSLEY:
 0.0022 CM/SEC
 BOUWER & RICE:
 0.0066 CM/SEC

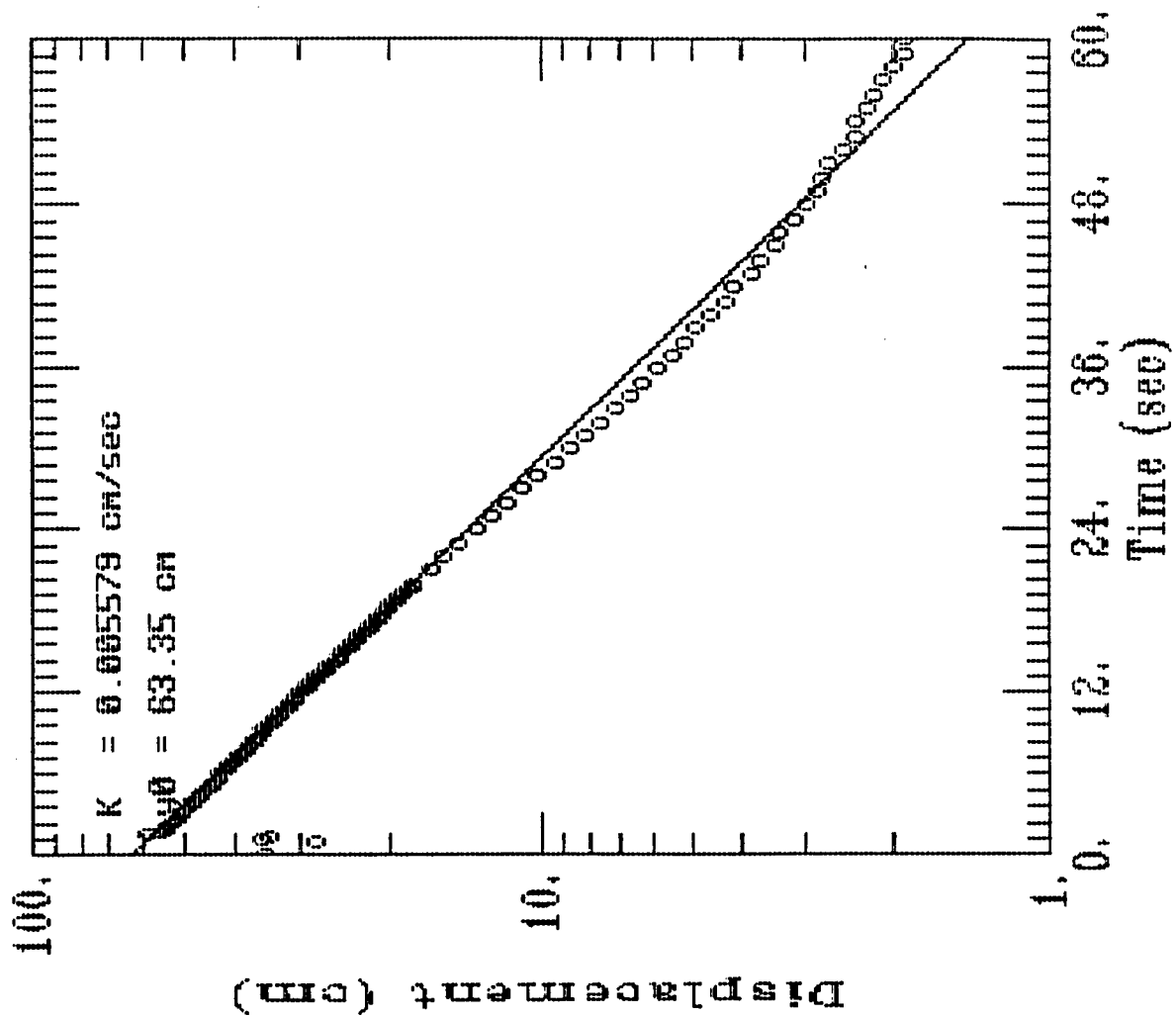
0.3833	0.466
0.4	0.433
0.4166	0.406
0.4333	0.379
0.45	0.354
0.4666	0.328
0.4833	0.306
0.5	0.284
0.5166	0.265
0.5333	0.249
0.55	0.234
0.5666	0.218
0.5833	0.202
0.6	0.192
0.6166	0.18
0.6333	0.17
0.65	0.161
0.6666	0.151
0.6833	0.142
0.7	0.136
0.7166	0.129
0.7333	0.12
0.75	0.117
0.7666	0.11
0.7833	0.104
0.8	0.101
0.8166	0.094
0.8333	0.091
0.85	0.086
0.8666	0.085
0.8833	0.079
0.9	0.075
0.9166	0.075
0.9333	0.072
0.95	0.069
0.9666	0.066
0.9833	0.063
1	0.063
1.2	0.041
1.4	0.031
1.6	0.025
1.8	0.022
2	0.018
2.2	0.015
2.4	0.012
2.6	0.012
2.8	0.012
3	0.012
3.2	0.012
3.4	0.009
3.6	0.012
3.8	0.009
4	0.009
4.2	0.009
4.4	0.009
4.6	0.009
4.8	0.009
5	0.009
5.2	0.009

HVORSLEY:
 0.0022 CM/SEC
 BOUWER & RICE:
 0.0066 CM/SEC

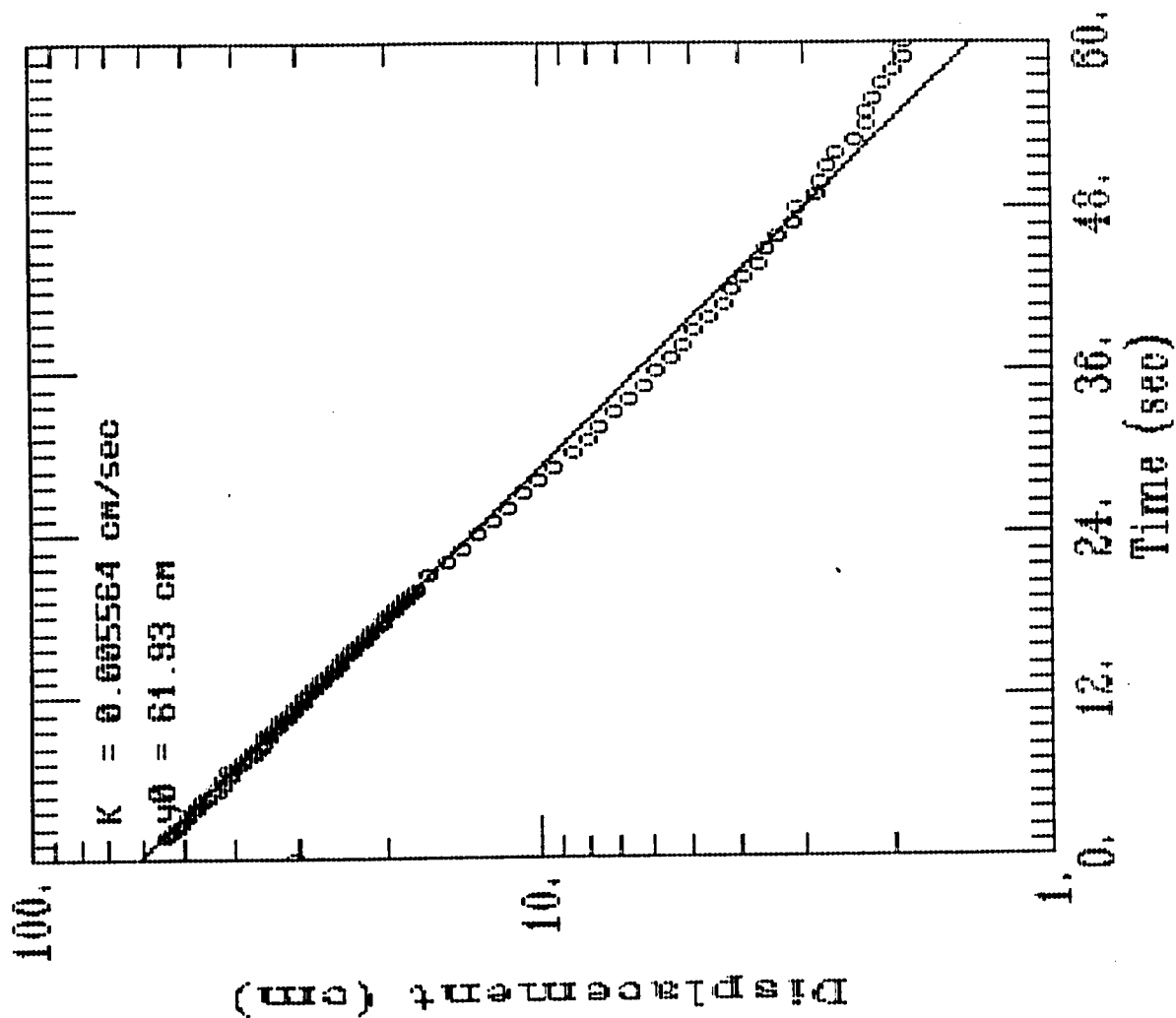
G6M-92-01X PERMEABILITY TESTS



G6M-92-01X PERMEABILITY TEST #1



G6M-92-01X PERMEABILITY TEST #2



✓ WK1
✓ GRAPU

AQUIFER TESTING	
SETUP	
WELL ID	GGM-92-01X / 4"
DATE OF TEST	10-06-92
TYPE OF TEST	RISING HEAD / SLUG OUT
HERMIT TYPE / SERIAL #	SE 1000C / IRC01732
TEST #	SEL 8
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	60.76 (PVC)
WELL DEPTH (FT/TOC)	67.26 (PVC)
XD DEPTH (FT/TOC)	66.5 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	65.00 (PVC)
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 1 OF 2 SLUG: 3"x2" SOLID CORE PVC ROD R. RUSTAD D. PIERCE	

✓ WK1
✓ GRAPU

AQUIFER TESTING	
SETUP	
WELL ID	66M.92.012 / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000C / 1260/732
TEST #	SEL 9
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	60.74 (PVC)
WELL DEPTH (FT/TOC)	67.26 (PVC)
XD DEPTH (FT/TOC)	66.5 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	65.00 (PVC)
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 2 OF 2	
R. RUSTAD D. PIERCE	

WELL G6M-02-02X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 7.4 FT. BORING DIAMETER = 0.333 FT

TEST 1
MINUTES

FEET

0	0.294
0.0033	2.014
0.0066	1.816
0.01	2.03
0.0133	1.151
0.0166	1.587
0.02	1.777
0.0233	2.106
0.0266	1.992
0.03	1.954
0.0333	1.922
0.0366	1.903
0.04	1.869
0.0433	1.84
0.0466	1.815
0.05	1.79
0.0533	1.781
0.0566	1.736
0.06	1.711
0.0633	1.685
0.0666	1.663
0.07	1.638
0.0733	1.606
0.0766	1.6
0.08	1.568
0.0833	1.552
0.0866	1.53
0.09	1.506
0.0933	1.492
0.0966	1.47
0.1	1.458
0.1033	1.432
0.1066	1.42
0.11	1.384
0.1133	1.385
0.1166	1.366
0.12	1.353
0.1233	1.334
0.1266	1.318
0.13	1.303
0.1333	1.284
0.1366	1.274
0.14	1.255
0.1433	1.239
0.1466	1.227
0.15	1.211
0.1533	1.196
0.1566	1.182
0.16	1.167
0.1633	1.154
0.1666	1.141
0.17	1.125
0.1733	1.113
0.1766	1.1
0.18	1.086
0.1833	1.075
0.1866	1.062
0.19	1.05
0.1933	1.037
0.1966	1.027
0.2	1.015
0.2033	1.002
0.2066	0.993
0.21	0.98
0.2133	0.97
0.2166	0.956
0.22	0.946
0.2233	0.939
0.2266	0.926
0.23	0.917
0.2333	0.907
0.2366	0.896
0.24	0.888
0.2433	0.879
0.2466	0.869
0.25	0.86
0.2533	0.85
0.2566	0.841
0.26	0.831
0.2633	0.825
0.2666	0.816
0.27	0.806
0.2733	0.8
0.2766	0.79
0.28	0.784
0.2833	0.774
0.2866	0.765
0.29	0.759
0.2933	0.752
0.2966	0.743
0.3	0.736
0.3033	0.73
0.3066	0.724
0.31	0.714
0.3133	0.706
0.3166	0.702
0.32	0.695
0.3233	0.689
0.3266	0.683
0.33	0.673
0.3333	0.67
0.35	0.635
0.3666	0.607
0.3833	0.578
0.4	0.553
0.4166	0.531
0.4333	0.509
0.45	0.487
0.4666	0.471
0.4833	0.452
0.5	0.439
0.5166	0.423
0.5333	0.411
0.55	0.396

TEST 2
MINUTES

FEET

0	0
0.0033	0.072
0.0066	1.733
0.01	2.621
0.0133	1.818
0.0166	1.704
0.02	0.373
0.0233	1.992
0.0266	1.707
0.03	1.733
0.0333	1.662
0.0366	1.654
0.04	1.622
0.0433	1.597
0.0466	1.549
0.05	1.54
0.0533	1.506
0.0566	1.483
0.06	1.454
0.0633	1.435
0.0666	1.416
0.07	1.386
0.0733	1.363
0.0766	1.347
0.08	1.326
0.0833	1.306
0.0866	1.284
0.09	1.274
0.0933	1.242
0.0966	1.227
0.1	1.205
0.1033	1.186
0.1066	1.17
0.11	1.154
0.1133	1.138
0.1166	1.119
0.12	1.103
0.1233	1.087
0.1266	1.072
0.13	1.056
0.1333	1.04
0.1366	1.024
0.14	1.008
0.1433	0.993
0.1466	0.98
0.15	0.961
0.1533	0.939
0.1566	0.933
0.16	0.926
0.1633	0.907
0.1666	0.895
0.17	0.879
0.1733	0.866
0.1766	0.853
0.18	0.841
0.1833	0.828
0.1866	0.815
0.19	0.803
0.1933	0.793
0.1966	0.787
0.2	0.782
0.2033	0.755
0.2066	0.743
0.21	0.736
0.2133	0.705
0.2166	0.717
0.22	0.702
0.2233	0.683
0.2266	0.683
0.23	0.667
0.2333	0.67
0.2366	0.648
0.24	0.636
0.2433	0.632
0.2466	0.619
0.25	0.613
0.2533	0.604
0.2566	0.594
0.26	0.588
0.2633	0.572
0.2666	0.572
0.27	0.553
0.2733	0.553
0.2766	0.544
0.28	0.525
0.2833	0.531
0.2866	0.518
0.29	0.512
0.2933	0.506
0.2966	0.496
0.3	0.49
0.3033	0.483
0.3066	0.471
0.31	0.471
0.3133	0.464
0.3166	0.455
0.32	0.449
0.3233	0.449
0.3266	0.433
0.33	0.426
0.3333	0.42
0.35	0.389
0.3666	0.36
0.3833	0.332
0.4	0.306
0.4166	0.284
0.4333	0.262
0.45	0.243
0.4666	0.221
0.4833	0.205
0.5	0.192
0.5166	0.177
0.5333	0.164
0.55	0.151

0.5000	0.385
0.5833	0.378
0.6	0.368
0.6100	0.357
0.6333	0.351
0.65	0.344
0.6600	0.335
0.6833	0.332
0.7	0.325
0.7100	0.319
0.7333	0.316
0.75	0.309
0.7600	0.306
0.7833	0.303
0.8	0.297
0.8100	0.294
0.8333	0.294
0.85	0.287
0.8600	0.287
0.8833	0.284
0.9	0.281
0.9100	0.281
0.9333	0.278
0.95	0.278
0.9600	0.275
0.9833	0.275
1	0.272
1.2	0.259
1.4	0.256
1.6	0.256
1.8	0.256
2	0.256
2.2	0.253
2.4	0.256
2.6	0.253
2.8	0.253
3	0.253
3.2	0.253
3.4	0.253
3.6	0.253
3.8	0.253
4	0.253
4.2	0.253
4.4	0.253
4.6	0.253
4.8	0.253
5	0.253
5.2	0.253
5.4	0.253
5.6	0.249
5.8	0.253
6	0.253
6.2	0.249
6.4	0.253
6.6	0.249
6.8	0.253

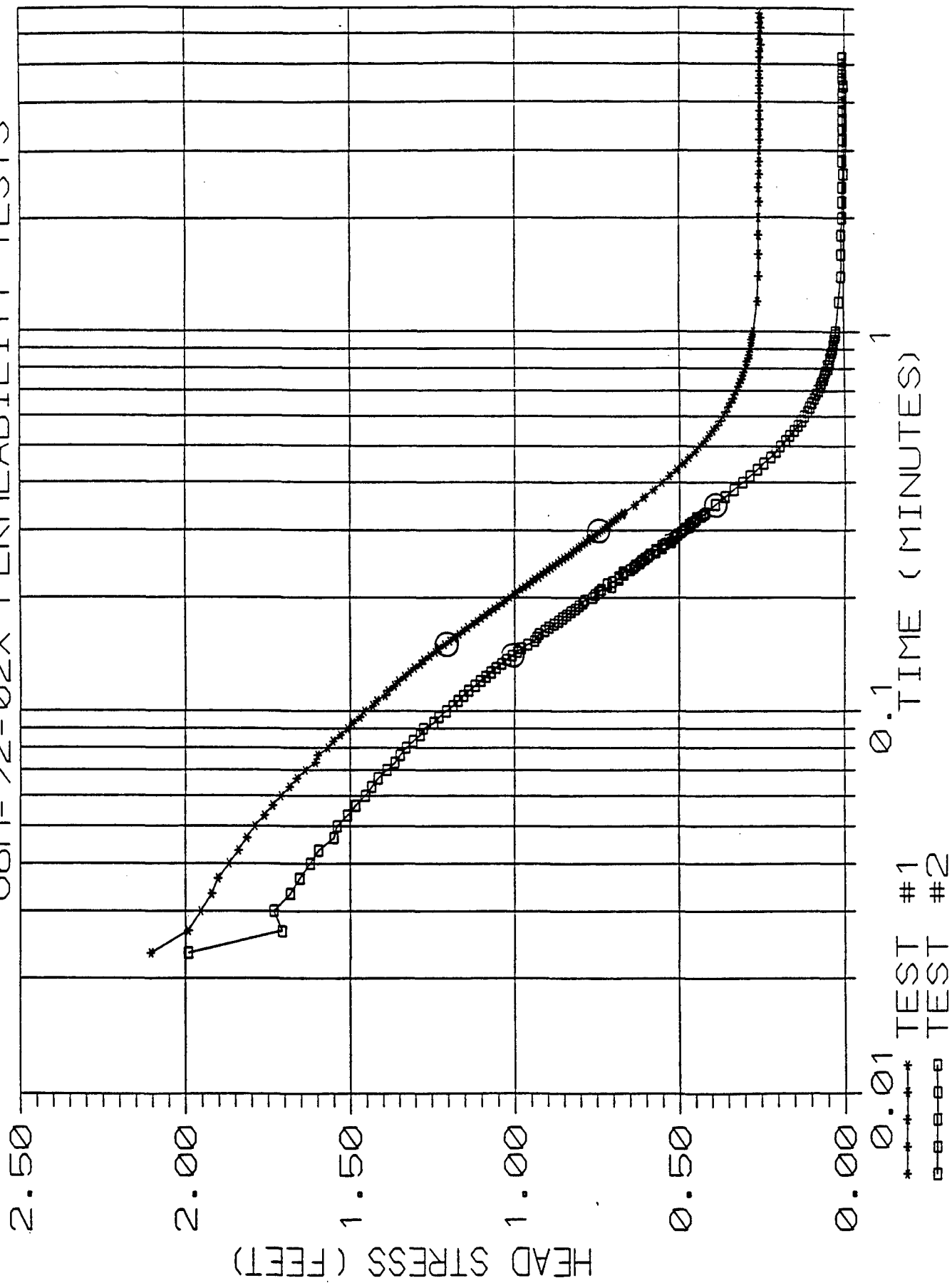
0.5000	0.139
0.5833	0.129
0.6	0.12
0.6100	0.11
0.6333	0.104
0.65	0.098
0.6600	0.091
0.6833	0.085
0.7	0.079
0.7100	0.072
0.7333	0.068
0.75	0.063
0.7600	0.06
0.7833	0.058
0.8	0.05
0.8100	0.05
0.8333	0.044
0.85	0.044
0.8600	0.041
0.8833	0.037
0.9	0.034
0.9100	0.034
0.9333	0.031
0.95	0.031
0.9600	0.028
0.9833	0.025
1	0.025
1.2	0.015
1.4	0.009
1.6	0.009
1.8	0.009
2	0.008
2.2	0.008
2.4	0.008
2.6	0.003
2.8	0.006
3	0.006
3.2	0.006
3.4	0.006
3.6	0.006
3.8	0.006
4	0.006
4.2	0.006
4.4	0.003
4.6	0.006
4.8	0.006
5	0.006
5.2	0.006

PERMEABILITY TEST RESULTS FOR G6M-02-02X

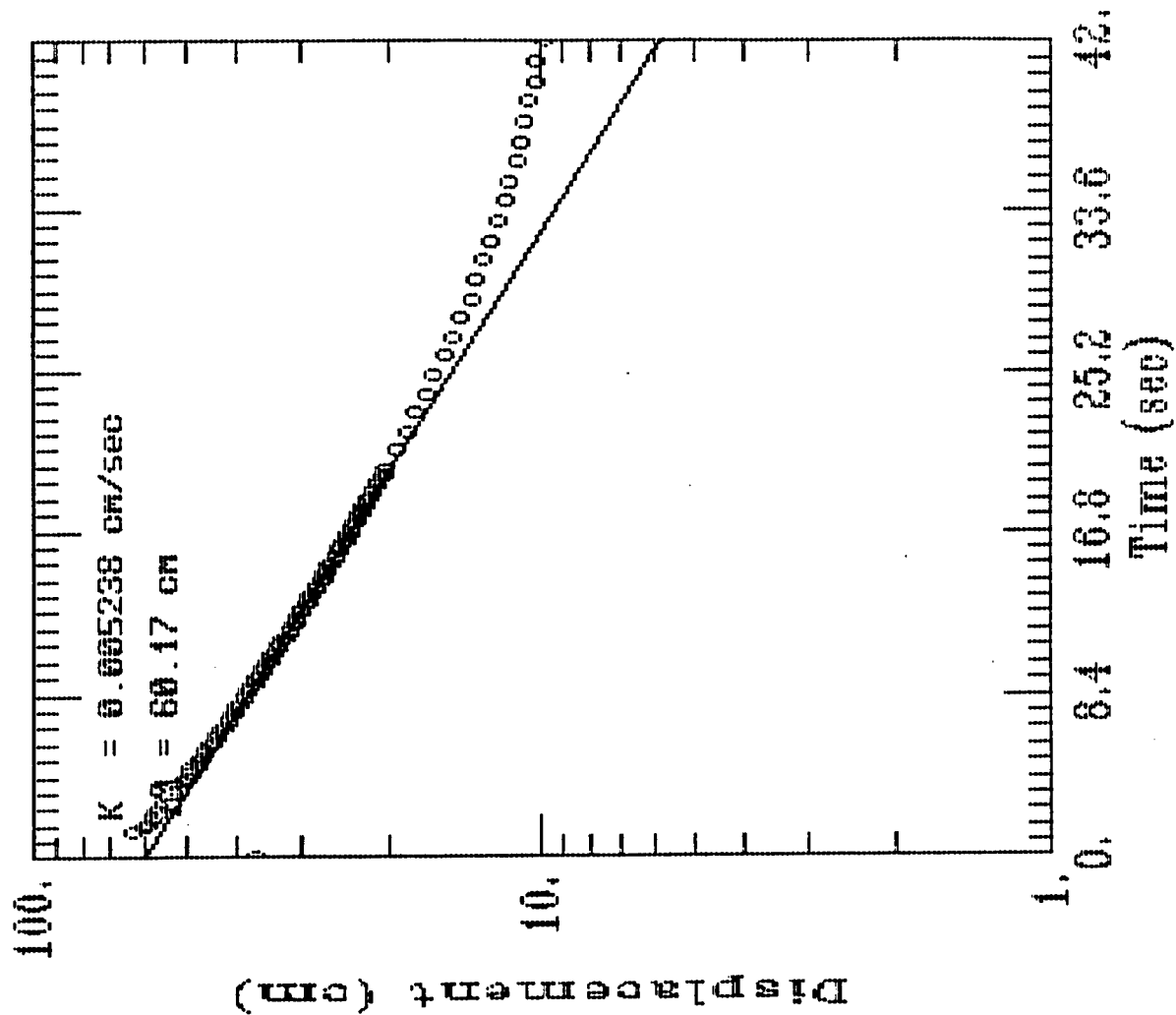
HYDRSLEV:
0017 CM/SEC
XUWER & RICE:
0052 CM/SEC

HYDRSLEV:
0.0025 CM/SEC
XUWER & RICE:
0.0071 CM/SEC

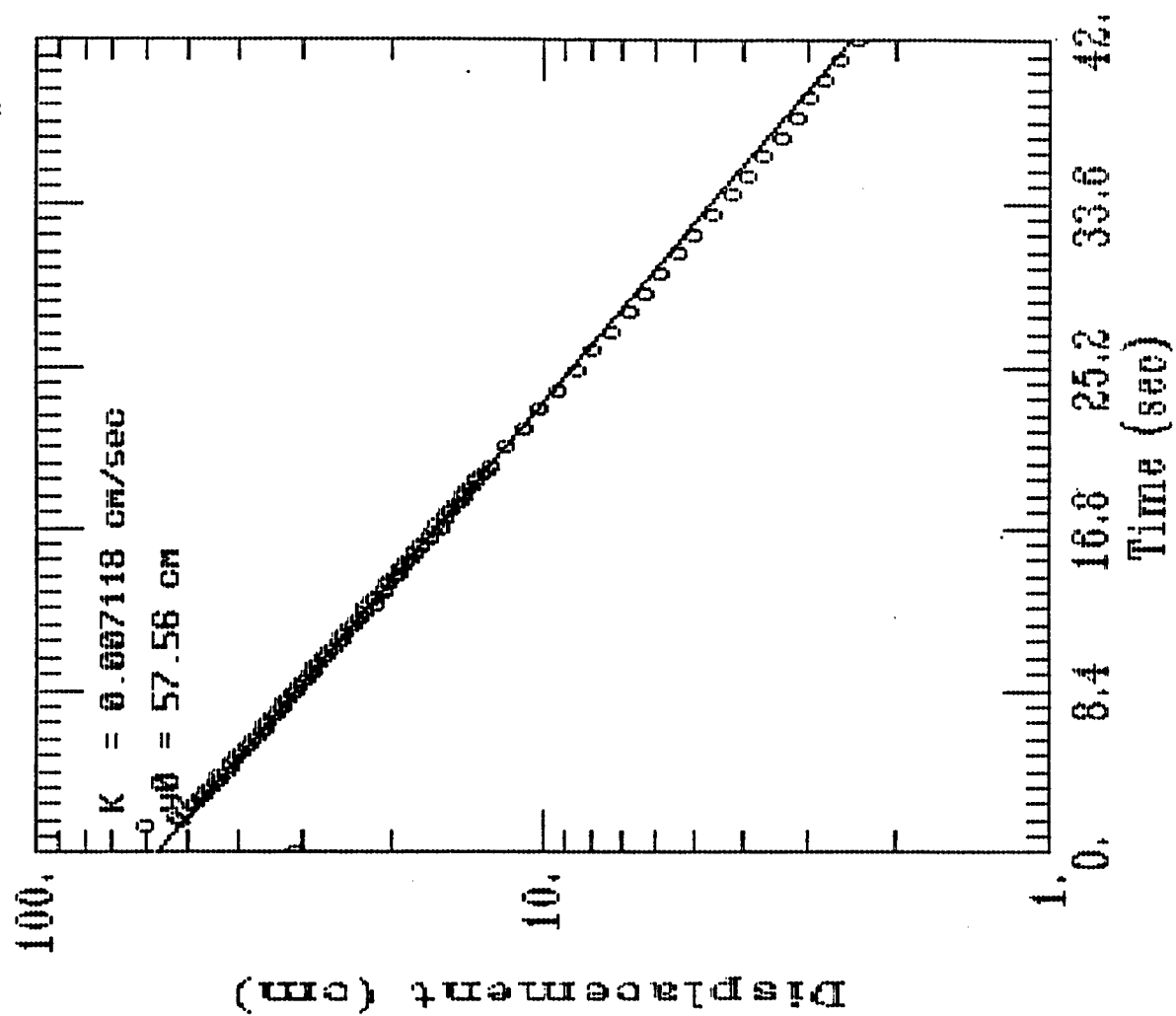
G6M-92-02X PERMEABILITY TESTS



G6M-92-02X PERMEABILITY TEST #1



G6M-92-02X PERMEABILITY TEST #2



✓ WK1
✓ GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	GGM-92-02X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000C / MK01732
TEST #	SEL 2
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	204652
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	68.15 (PVC)
WELL DEPTH (FT/TOC)	75.55
XD DEPTH (FT/TOC)	74.5
INITIAL XD REFERENCE	0.0
SLUG DEPTH (FT/TOC)	73.0
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 1 OF 2	
R. LUSHINS D. PERCE	

✓ WK1
✓ GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	64M-92-02x / 4"
DATE OF TEST	10-06-92
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	5810006 / 1KC01732
TEST #	SEL 3
DATA COLLECTION RATE	Low 1
DUCER	
SERIAL #	204652
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	68.14
WELL DEPTH (FT/TOC)	75.55
XD DEPTH (FT/TOC)	74.5
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	73.0
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 2 OF 2	
R. RUSAD D. PILAGE	

WELL G6M-02-03X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 8.7 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

0	0.759
0.0033	1.359
0.0066	0.825
0.01	-0.265
0.0133	1.136
0.0166	1.132
0.02	1.66
0.0233	1.696
0.0266	1.704
0.03	1.663
0.0333	1.635
0.0366	1.613
0.04	1.581
0.0433	1.549
0.0466	1.54
0.05	1.521
0.0533	1.486
0.0566	1.483
0.06	1.467
0.0633	1.467
0.0666	1.445
0.07	1.432
0.0733	1.42
0.0766	1.401
0.08	1.388
0.0833	1.372
0.0866	1.356
0.09	1.344
0.0933	1.325
0.0966	1.299
0.1	1.293
0.1033	1.28
0.1066	1.265
0.11	1.258
0.1133	1.252
0.1166	1.239
0.12	1.227
0.1233	1.223
0.1266	1.211
0.13	1.195
0.1333	1.179
0.1366	1.163
0.14	1.151
0.1433	1.141
0.1466	1.129
0.15	1.116
0.1533	1.113
0.1566	1.103
0.16	1.087
0.1633	1.078
0.1666	1.061
0.17	1.075
0.1733	1.062
0.1766	1.05
0.18	1.04
0.1833	1.031
0.1866	1.015
0.19	1.005
0.1933	0.999
0.1966	0.986
0.2	0.974
0.2033	0.964
0.2066	0.958
0.21	0.948
0.2133	0.936
0.2166	0.929
0.22	0.923
0.2233	0.914
0.2266	0.904
0.23	0.895
0.2333	0.891
0.2366	0.879
0.24	0.869
0.2433	0.866
0.2466	0.857
0.25	0.847
0.2533	0.841
0.2566	0.834
0.26	0.826
0.2633	0.815
0.2666	0.809
0.27	0.806
0.2733	0.797
0.2766	0.787
0.28	0.781
0.2833	0.774
0.2866	0.771
0.29	0.755
0.2933	0.755
0.2966	0.746
0.3	0.74
0.3033	0.73
0.3066	0.727
0.31	0.717
0.3133	0.711
0.3166	0.706
0.32	0.702
0.3233	0.692
0.3266	0.686
0.33	0.683
0.3333	0.676
0.35	0.648
0.3666	0.616
0.3833	0.588
0.4	0.562
0.4166	0.537
0.4333	0.515
0.45	0.496
0.4666	0.474
0.4833	0.455
0.5	0.442
0.5166	0.423
0.5333	0.408
0.55	0.401

TEST 2
MINUTES

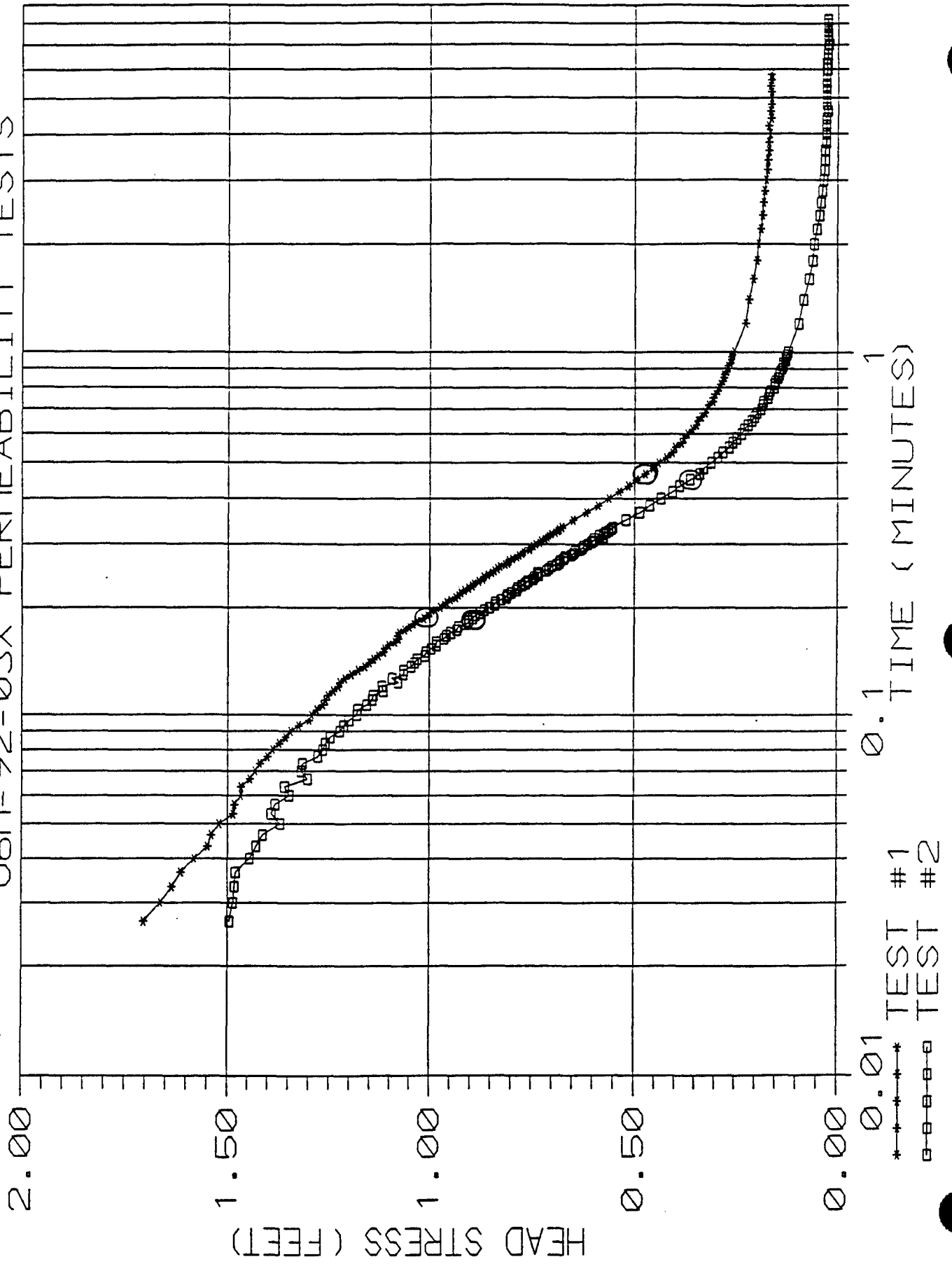
0	-0.003
0.0033	1.401
0.0066	0.632
0.01	1.521
0.0133	-0.142
0.0166	0.766
0.02	1.454
0.0233	1.711
0.0266	1.495
0.03	1.486
0.0333	1.483
0.0366	1.46
0.04	1.445
0.0433	1.429
0.0466	1.413
0.05	1.369
0.0533	1.391
0.0566	1.382
0.06	1.347
0.0633	1.359
0.0666	1.303
0.07	1.318
0.0733	1.315
0.0766	1.277
0.08	1.265
0.0833	1.256
0.0866	1.246
0.09	1.223
0.0933	1.214
0.0966	1.201
0.1	1.182
0.1033	1.179
0.1066	1.157
0.11	1.144
0.1133	1.141
0.1166	1.116
0.12	1.119
0.1233	1.078
0.1266	1.094
0.13	1.065
0.1333	1.065
0.1366	1.046
0.14	1.037
0.1433	1.031
0.1466	1.012
0.15	1.008
0.1533	0.996
0.1566	0.983
0.16	0.983
0.1633	0.964
0.1666	0.956
0.17	0.948
0.1733	0.933
0.1766	0.929
0.18	0.91
0.1833	0.904
0.1866	0.895
0.19	0.888
0.1933	0.876
0.1966	0.866
0.2	0.853
0.2033	0.841
0.2066	0.838
0.21	0.825
0.2133	0.812
0.2166	0.809
0.22	0.8
0.2233	0.787
0.2266	0.784
0.23	0.774
0.2333	0.765
0.2366	0.759
0.24	0.746
0.2433	0.743
0.2466	0.733
0.25	0.736
0.2533	0.714
0.2566	0.706
0.26	0.702
0.2633	0.689
0.2666	0.683
0.27	0.66
0.2733	0.673
0.2766	0.67
0.28	0.654
0.2833	0.648
0.2866	0.645
0.29	0.632
0.2933	0.626
0.2966	0.623
0.3	0.613
0.3033	0.604
0.3066	0.6
0.31	0.597
0.3133	0.575
0.3166	0.585
0.32	0.575
0.3233	0.569
0.3266	0.562
0.33	0.556
0.3333	0.553
0.35	0.521
0.3666	0.487
0.3833	0.464
0.4	0.436
0.4166	0.407
0.4333	0.389
0.45	0.363
0.4666	0.336
0.4833	0.326
0.5	0.309
0.5166	0.294
0.5333	0.281
0.55	0.265

0.365
0.379
0.37
0.357
0.347
0.344
0.335
0.325
0.316
0.306
0.306
0.3
0.294
0.29
0.287
0.281
0.278
0.278
0.271
0.266
0.266
0.262
0.259
0.256
0.253
0.224
0.215
0.205
0.196
0.192
0.186
0.183
0.18
0.177
0.173
0.17
0.167
0.167
0.164
0.164
0.161
0.161
0.161
0.161
0.164
0.161
0.161

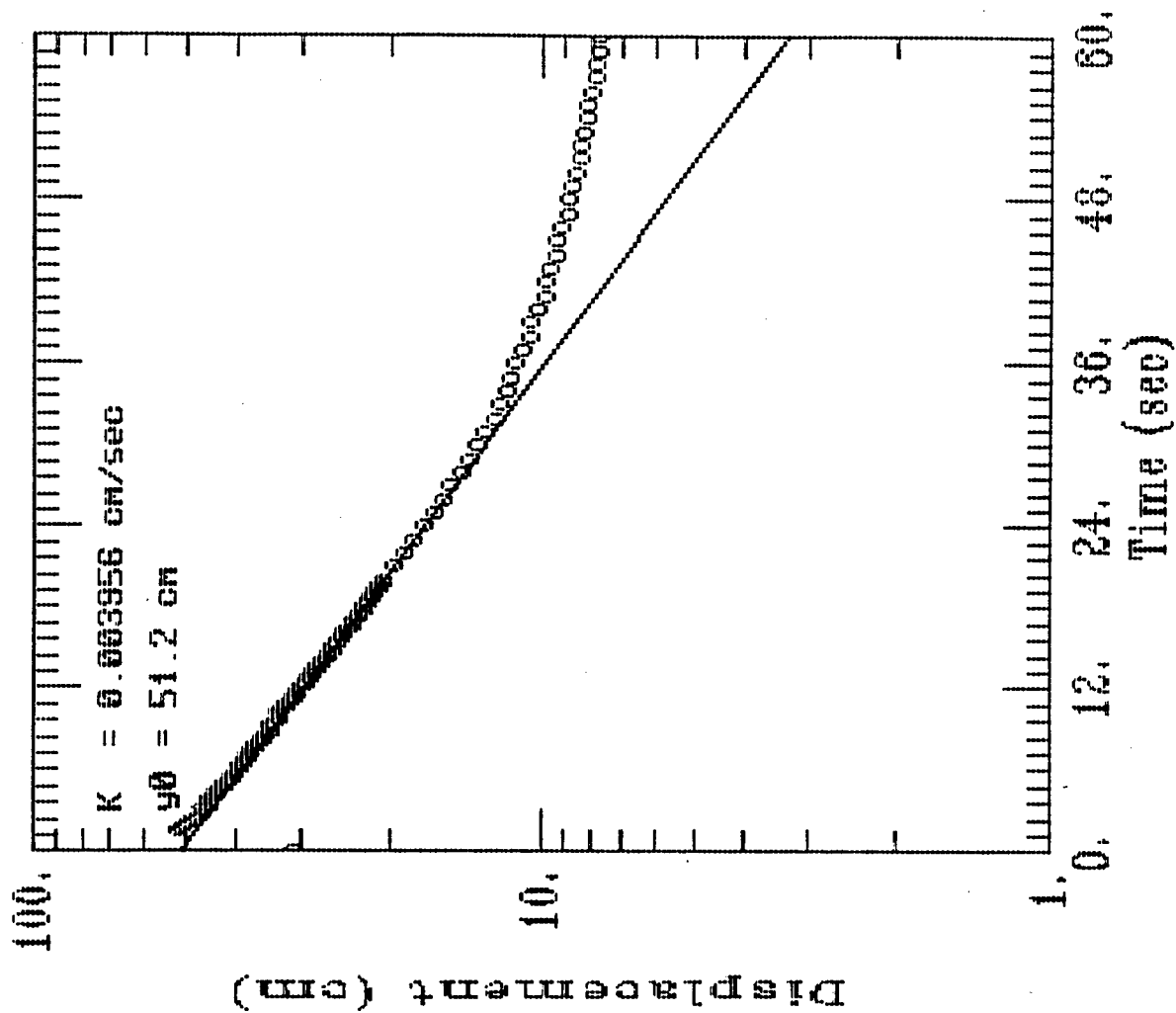
PERMEABILITY TEST RESULTS FOR G6M-92-03X
HVORSLEV:
0.0013 CM/SEC
BOUWER & RICE:
0.004 CM/SEC\

HWORSLEV:
0.0016 CM/SEC
BOUWER & RICE:
0.0049 CM/SEC

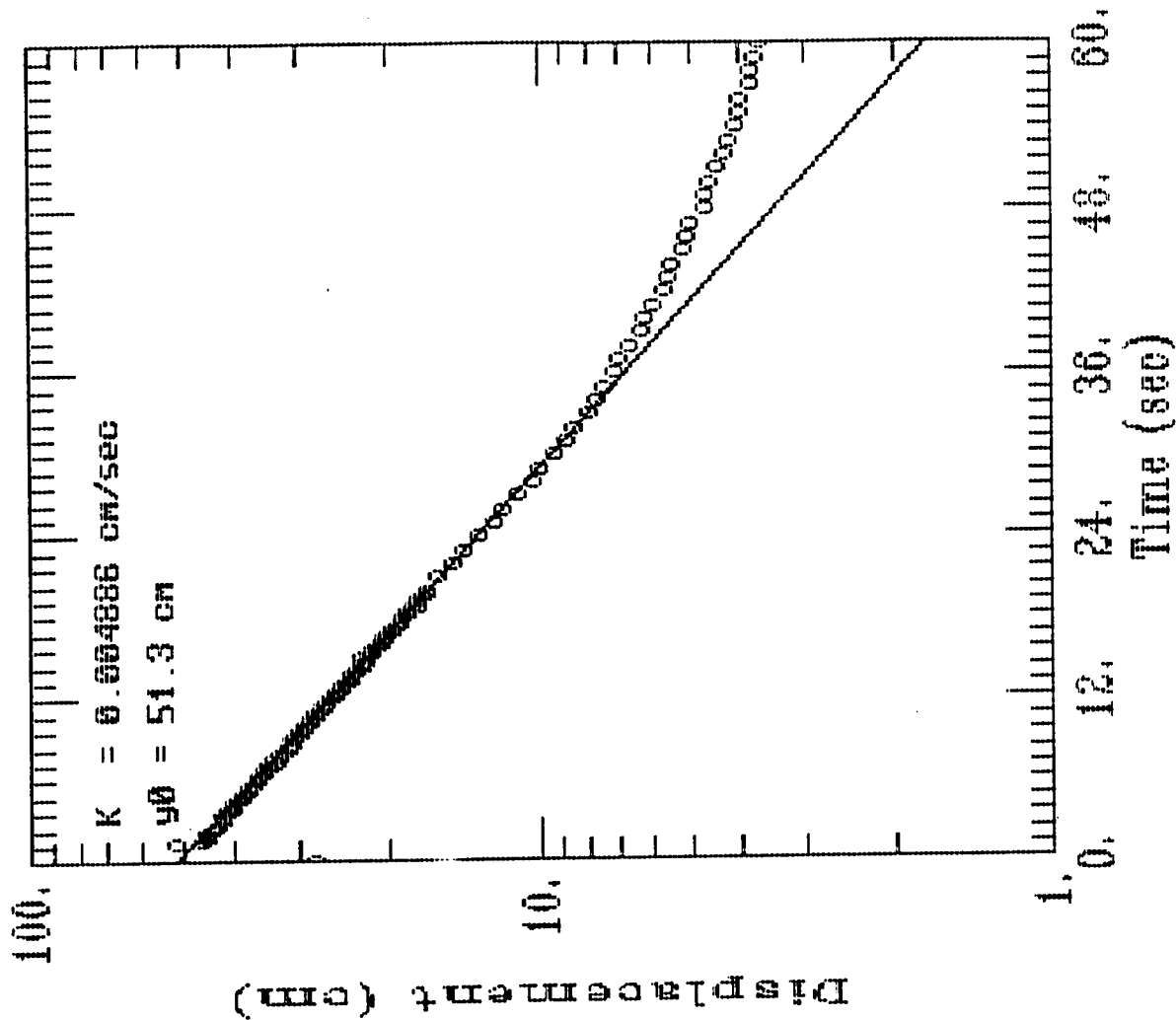
G6M-92-03X PERMEABILITY TESTS



G6M-92-03X PERMEABILITY TEST #1



G6M-92-09X PERMEABILITY TEST #2



✓ NEI
✓ GRAP 21

AQUIFER TESTING	
SETUP	
WELL ID	UGM-92.03X / 4"
DATE OF TEST	10-06-92
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	SE10000 / 1K661732
TEST #	SEL 0
DATA COLLECTION RATE	LOG
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	# 1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	63.41
WELL DEPTH (FT/TOC)	71.58
XD DEPTH (FT/TOC)	70.5
INITIAL XD REFERENCE	0.0
SLUG DEPTH (FT/TOC)	
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST #1 OF 2	
R. Rustad	
D. Pierce	

✓ WK1
✓ GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	66M-92.03X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	Rising Head
HERMIT TYPE / SERIAL #	SE1000C / 1K01732
TEST #	SEL 1
DATA COLLECTION RATE	LOW 1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	#1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	63.38
WELL DEPTH (FT/TOC)	71.58
XD DEPTH (FT/TOC)	70.5
INITIAL XD REFERENCE	0
SLUG DEPTH (FT/TOC)	68'
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 2 of 2 <div style="text-align: right;">R. RUSTAD D. PERC</div>	

WELL G6M-02-04X

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 5.9 FT, BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	0.145
0.0033	0.933
0.0066	1.008
0.01	0.948
0.0133	0.398
0.0166	0.885
0.02	1.375
0.0233	1.73
0.0266	1.442
0.03	1.384
0.0333	1.334
0.0366	1.258
0.04	1.179
0.0433	1.116
0.0466	1.04
0.05	0.977
0.0533	0.914
0.0566	0.847
0.06	0.783
0.0633	0.743
0.0666	0.689
0.07	0.638
0.0733	0.585
0.0766	0.556
0.08	0.515
0.0833	0.477
0.0866	0.449
0.09	0.411
0.0933	0.382
0.0966	0.354
0.1	0.354
0.1033	0.308
0.1066	0.284
0.11	0.285
0.1133	0.246
0.1166	0.227
0.12	0.215
0.1233	0.198
0.1266	0.183
0.13	0.17
0.1333	0.164
0.1366	0.148
0.14	0.139
0.1433	0.132
0.1466	0.123
0.15	0.113
0.1533	0.107
0.1566	0.101
0.16	0.094
0.1633	0.088
0.1666	0.085
0.17	0.079
0.1733	0.075
0.1766	0.069
0.18	0.066
0.1833	0.063
0.1866	0.06
0.19	0.056
0.1933	0.053
0.1966	0.05
0.2	0.047
0.2033	0.047
0.2066	0.044
0.21	0.041
0.2133	0.041
0.2166	0.037
0.22	0.037
0.2233	0.034
0.2266	0.034
0.23	0.034
0.2333	0.031
0.2366	0.031
0.24	0.028
0.2433	0.028
0.2466	0.028
0.25	0.028
0.2533	0.025
0.2566	0.025
0.26	0.025
0.2633	0.022
0.2666	0.022
0.27	0.022
0.2733	0.022
0.2766	0.015
0.28	0.022
0.2833	0.018
0.2866	0.022
0.29	0.018
0.2933	0.018

TEST 2
MINUTES

FEET

0	0.058
0.0033	2.368
0.0066	1.018
0.01	2.052
0.0133	0.819
0.0166	1.492
0.02	1.584
0.0233	1.489
0.0266	1.404
0.03	1.312
0.0333	1.233
0.0366	1.183
0.04	1.094
0.0433	1.024
0.0466	0.955
0.05	0.907
0.0533	0.844
0.0566	0.787
0.06	0.733
0.0633	0.683
0.0666	0.629
0.07	0.588
0.0733	0.537
0.0766	0.515
0.08	0.499
0.0833	0.436
0.0866	0.411
0.09	0.382
0.0933	0.36
0.0966	0.325
0.1	0.303
0.1033	0.272
0.1066	0.285
0.11	0.259
0.1133	0.227
0.1166	0.205
0.12	0.199
0.1233	0.177
0.1266	0.177
0.13	0.151
0.1333	0.158
0.1366	0.142
0.14	0.135
0.1433	0.123
0.1466	0.12
0.15	0.107
0.1533	0.104
0.1566	0.094
0.16	0.091
0.1633	0.082
0.1666	0.079
0.17	0.075
0.1733	0.063
0.1766	0.069
0.18	0.063
0.1833	0.063
0.1866	0.056
0.19	0.056
0.1933	0.056
0.1966	0.053
0.2	0.044
0.2033	0.047
0.2066	0.044
0.21	0.037
0.2133	0.041
0.2166	0.041
0.22	0.037
0.2233	0.034
0.2266	0.034
0.23	0.031
0.2333	0.031
0.2366	0.031
0.24	0.028
0.2433	0.028
0.2466	0.028
0.25	0.025
0.2533	0.028
0.2566	0.025
0.26	0.025
0.2633	0.025
0.2666	0.022
0.27	0.022
0.2733	0.022
0.2766	0.018
0.28	0.018
0.2833	0.025
0.2866	0.018
0.29	0.018
0.2933	0.015

0.2966	0.018
0.3	0.018
0.3033	0.018
0.3066	0.015
0.31	0.015
0.3133	0.015
0.3166	0.015
0.32	0.015
0.3233	0.015
0.3266	0.018
0.33	0.015
0.3333	0.015
0.35	0.015
0.3666	0.012
0.3833	0.012
0.4	0.009
0.4166	0.009
0.4333	0.009
0.45	0.009
0.4666	0.009
0.4833	0.009
0.5	0.009
0.5166	0.006
0.5333	0.009
0.55	0.006
0.5666	0.006
0.5833	0.006
0.6	0.006
0.6166	0.006
0.6333	0.006
0.65	0.006
0.6666	0.006
0.6833	0.006
0.7	0.009
0.7166	0.003
0.7333	0.006
0.75	0.003
0.7666	0.006
0.7833	0.006
0.8	0.003
0.8166	0.003
0.8333	0.003
0.85	0.003
0.8666	0.003
0.8833	0.003
0.9	0.003
0.9166	0.003
0.9333	0.003
0.95	0.003
0.9666	0.003
0.9833	0.003
1	0.003
1.2	0
1.4	0
1.6	0
1.8	0
2	0
2.2	0.003
2.4	0.003
2.6	0.003
2.8	0
3	0
3.2	0
3.4	0
3.6	0
3.8	0
4	0
4.2	0
4.4	0
4.6	0
4.8	0
5	0
5.2	0
5.4	0
5.6	0
5.8	0

PERMEABILITY TEST RESULTS FOR G6M-02-04X

HYDRSLEV:

K= 0.013 CM/SEC

BOUWER & RICE:

K= 0.036 CM/SEC

0.2966	0.015
0.3	0.018
0.3033	0.015
0.3066	0.015
0.31	0.018
0.3133	0.018
0.3166	0.015
0.32	0.015
0.3233	0.012
0.3266	0.012
0.33	0.009
0.3333	0.012
0.35	0.012
0.3666	0.012
0.3833	0.012
0.4	0.009
0.4166	0.009
0.4333	0.006
0.45	0.009
0.4666	0.006
0.4833	0.006
0.5	0.006
0.5166	0.006
0.5333	0.006
0.55	0.006
0.5666	0.006
0.5833	0.006
0.6	0.006
0.6166	0.006
0.6333	0.003
0.65	0.003
0.6666	0.003
0.6833	0.006
0.7	0.003
0.7166	0.003
0.7333	0.003
0.75	0.003
0.7666	0.003
0.7833	0.003
0.8	0.003
0.8166	0.003
0.8333	0.003
0.85	0.003
0.8666	0.003
0.8833	0.003
0.9	0.003
0.9166	0.003
0.9333	0.003
0.95	0.003
0.9666	0.003
0.9833	0.003
1	0.003
1.2	0.003
1.4	0
1.6	0
1.8	0.003
2	0.003
2.2	0
2.4	0
2.6	0.003
2.8	0.003
3	0.003
3.2	0
3.4	0.003

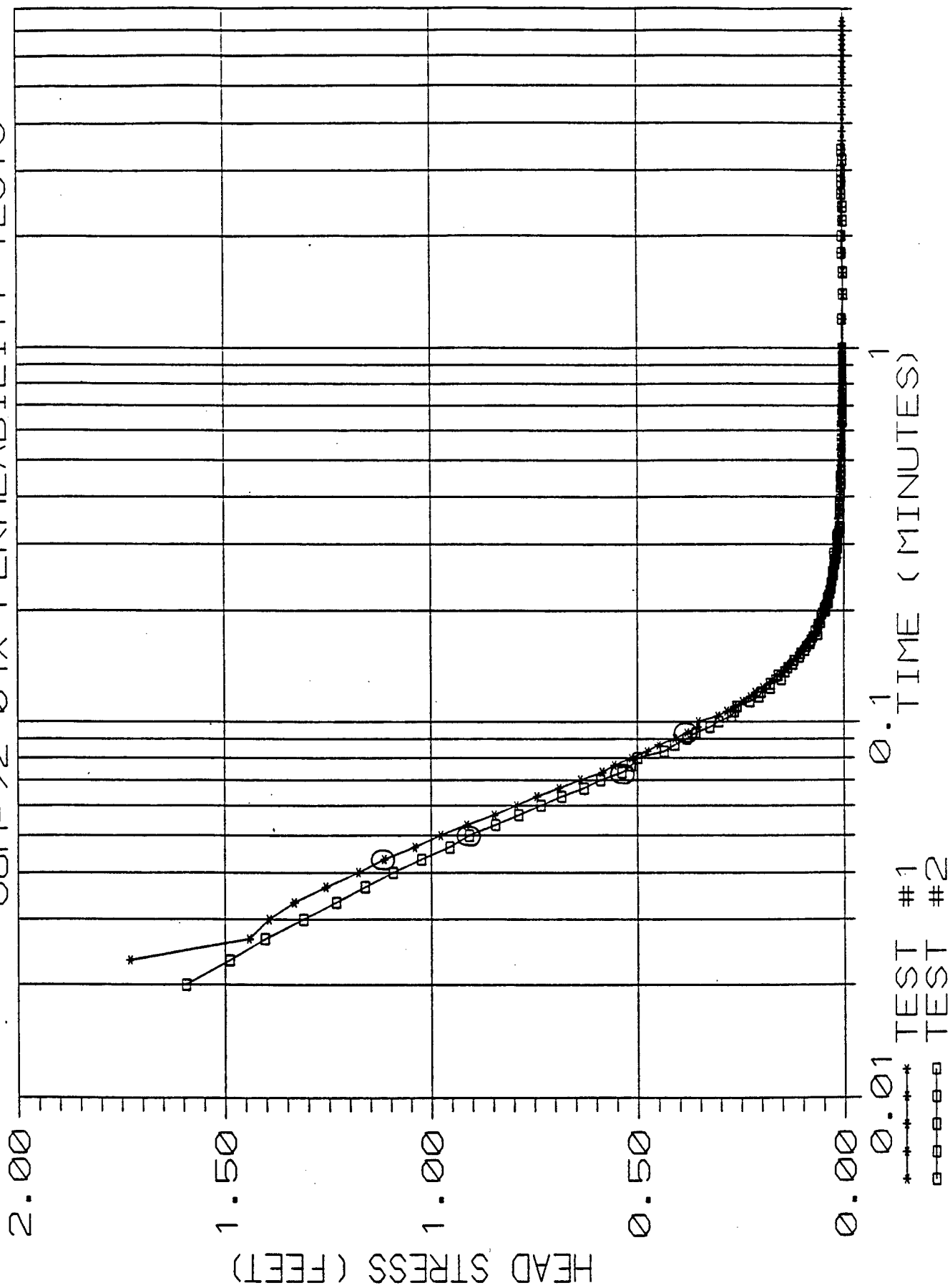
HYDRSLEV:

K= 0.013 CM/SEC

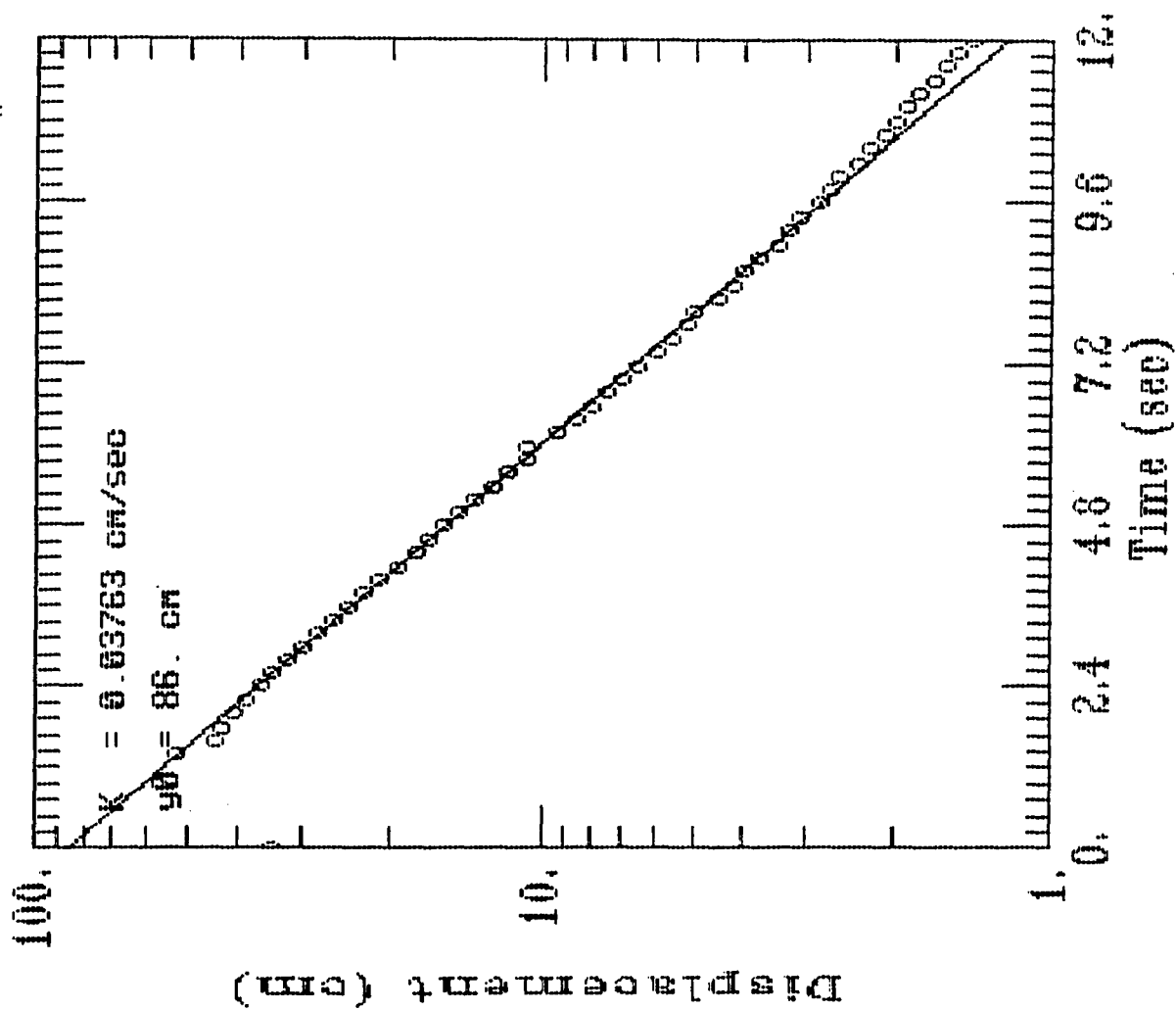
BOUWER & RICE:

K= 0.039 CM/SEC

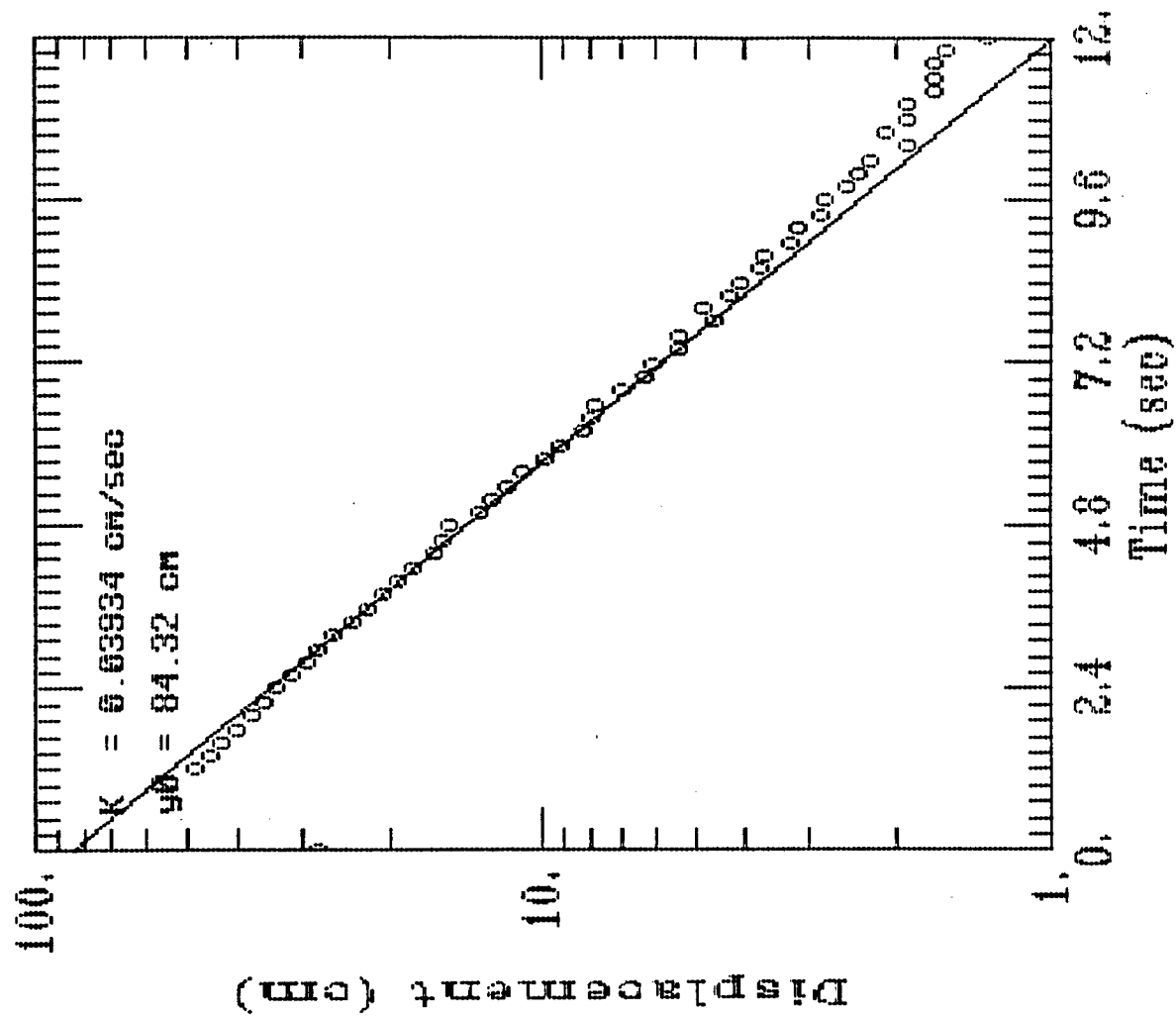
G6M-92-04X PERMEABILITY TESTS



G6M-92-04X PERMEABILITY TEST #1



G6M-92-04X PERMEABILITY TEST #2



✓ WPI
✓ GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	G6M.92.04X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	Rising Head / Slug out
HERMIT TYPE / SERIAL #	SE 1000C / 1K200732
TEST #	SEL 7
DATA COLLECTION RATE	Log 1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	68.10
WELL DEPTH (FT/TOC)	74.01
XD DEPTH (FT/TOC)	73.5
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	72.00
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 2002 R. RUSTAD SLUG: 3" x 3" PVC ROD TO PIERCE	

✓ WRI
✓ GIZAPU

AQUIFER TESTING	
SETUP	
WELL ID	65M.92.04X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000C / 1KC01332
TEST #	SEL 6
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	204635
PSIG	15
SCALE FACTOR	0.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	68.10 (PVC)
WELL DEPTH (FT/TOC)	74.01 (PVC)
XD DEPTH (FT/TOC)	73.5 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	72.0 (PVC)
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 1 OF 2	
SLUG: 3' x 3" PVC 200	
R. RUSTAD D. PIERCE	

WELL G6M-02-05X

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 6.2 FT, BORING DIAMETER = 0.533 FT

TEST 1
MINUTES

FEET

0	0.008
0.0033	0.17
0.0066	1.499
0.01	1.714
0.0133	1.059
0.0166	1.913
0.02	0.297
0.0233	1.755
0.0266	1.416
0.03	1.366
0.0333	1.293
0.0366	1.233
0.04	1.16
0.0433	1.097
0.0466	1.031
0.05	0.97
0.0533	0.92
0.0566	0.863
0.06	0.809
0.0633	0.771
0.0666	0.724
0.07	0.683
0.0733	0.635
0.0766	0.604
0.08	0.566
0.0833	0.537
0.0866	0.502
0.09	0.471
0.0933	0.439
0.0966	0.417
0.1	0.395
0.1033	0.376
0.1066	0.36
0.11	0.335
0.1133	0.332
0.1166	0.297
0.12	0.287
0.1233	0.265
0.1266	0.249
0.13	0.237
0.1333	0.221
0.1366	0.211
0.14	0.202
0.1433	0.199
0.1466	0.18
0.15	0.173
0.1533	0.164
0.1566	0.151
0.16	0.151
0.1633	0.145
0.1666	0.136
0.17	0.126
0.1733	0.123
0.1766	0.117
0.18	0.113
0.1833	0.104
0.1866	0.101
0.19	0.096
0.1933	0.094
0.1966	0.091
0.2	0.088
0.2033	0.085
0.2066	0.079
0.21	0.075
0.2133	0.075
0.2166	0.072
0.22	0.069
0.2233	0.066
0.2266	0.066
0.23	0.063
0.2333	0.063
0.2366	0.06
0.24	0.06
0.2433	0.056
0.2466	0.05
0.25	0.053
0.2533	0.05
0.2566	0.05
0.26	0.05
0.2633	0.047
0.2666	0.047
0.27	0.047
0.2733	0.044
0.2766	0.044
0.28	0.044
0.2833	0.044
0.2866	0.041
0.29	0.041
0.2933	0.041
0.2966	0.037
0.3	0.037
0.3033	0.037
0.3066	0.037
0.31	0.037
0.3133	0.034
0.3166	0.034
0.32	0.034
0.3233	0.034
0.3266	0.034
0.33	0.034
0.3333	0.034
0.35	0.031
0.3666	0.028
0.3833	0.028
0.4	0.028
0.4166	0.025
0.4333	0.025
0.45	0.025
0.4666	0.022
0.4833	0.022
0.5	0.022
0.5166	0.022
0.5333	0.022
0.55	0.022

TEST 2
MINUTES

FEET

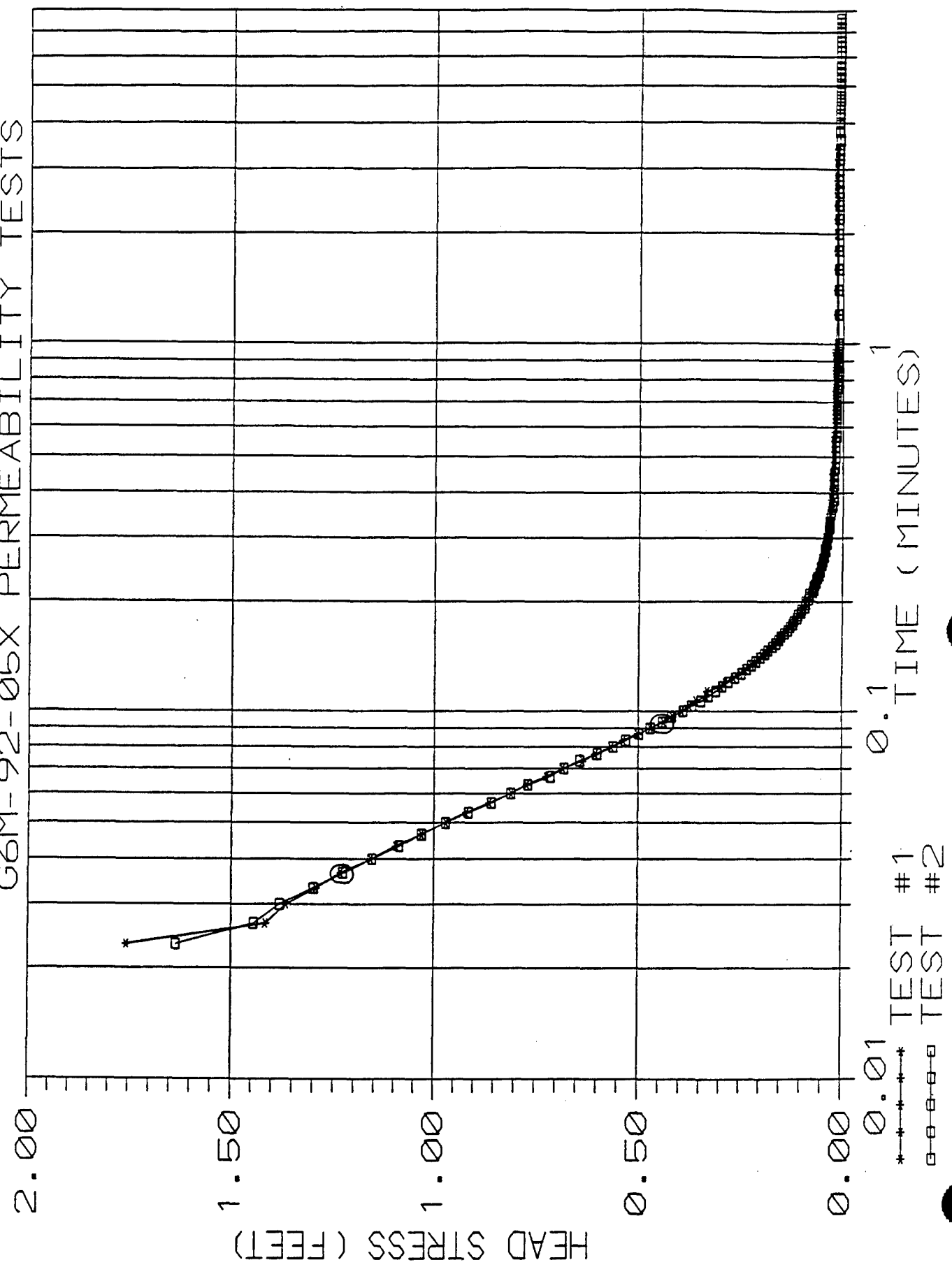
0	0.012
0.0033	0.089
0.0066	2.242
0.01	0.951
0.0133	1.889
0.0166	0.36
0.02	1.031
0.0233	1.635
0.0266	1.445
0.03	1.382
0.0333	1.299
0.0366	1.227
0.04	1.157
0.0433	1.088
0.0466	1.031
0.05	0.97
0.0533	0.914
0.0566	0.857
0.06	0.809
0.0633	0.768
0.0666	0.714
0.07	0.66
0.0733	0.642
0.0766	0.6
0.08	0.582
0.0833	0.531
0.0866	0.499
0.09	0.471
0.0933	0.442
0.0966	0.42
0.1	0.392
0.1033	0.37
0.1066	0.347
0.11	0.326
0.1133	0.309
0.1166	0.294
0.12	0.278
0.1233	0.262
0.1266	0.246
0.13	0.234
0.1333	0.221
0.1366	0.211
0.14	0.199
0.1433	0.189
0.1466	0.18
0.15	0.17
0.1533	0.161
0.1566	0.154
0.16	0.146
0.1633	0.139
0.1666	0.132
0.17	0.126
0.1733	0.12
0.1766	0.117
0.18	0.11
0.1833	0.107
0.1866	0.101
0.19	0.098
0.1933	0.091
0.1966	0.088
0.2	0.088
0.2033	0.082
0.2066	0.079
0.21	0.079
0.2133	0.072
0.2166	0.069
0.22	0.066
0.2233	0.066
0.2266	0.063
0.23	0.063
0.2333	0.06
0.2366	0.056
0.24	0.056
0.2433	0.053
0.2466	0.053
0.25	0.053
0.2533	0.05
0.2566	0.05
0.26	0.047
0.2633	0.047
0.2666	0.044
0.27	0.044
0.2733	0.044
0.2766	0.041
0.28	0.044
0.2833	0.041
0.2866	0.041
0.29	0.037
0.2933	0.037
0.2966	0.037
0.3	0.037
0.3033	0.034
0.3066	0.034
0.31	0.034
0.3133	0.034
0.3166	0.034
0.32	0.031
0.3233	0.031
0.3266	0.031
0.33	0.031
0.3333	0.031
0.35	0.028
0.3666	0.025
0.3833	0.022
0.4	0.025
0.4166	0.022
0.4333	0.022
0.45	0.022
0.4666	0.018
0.4833	0.018
0.5	0.018
0.5166	0.018
0.5333	0.018
0.55	0.018

[illegible][illegible]

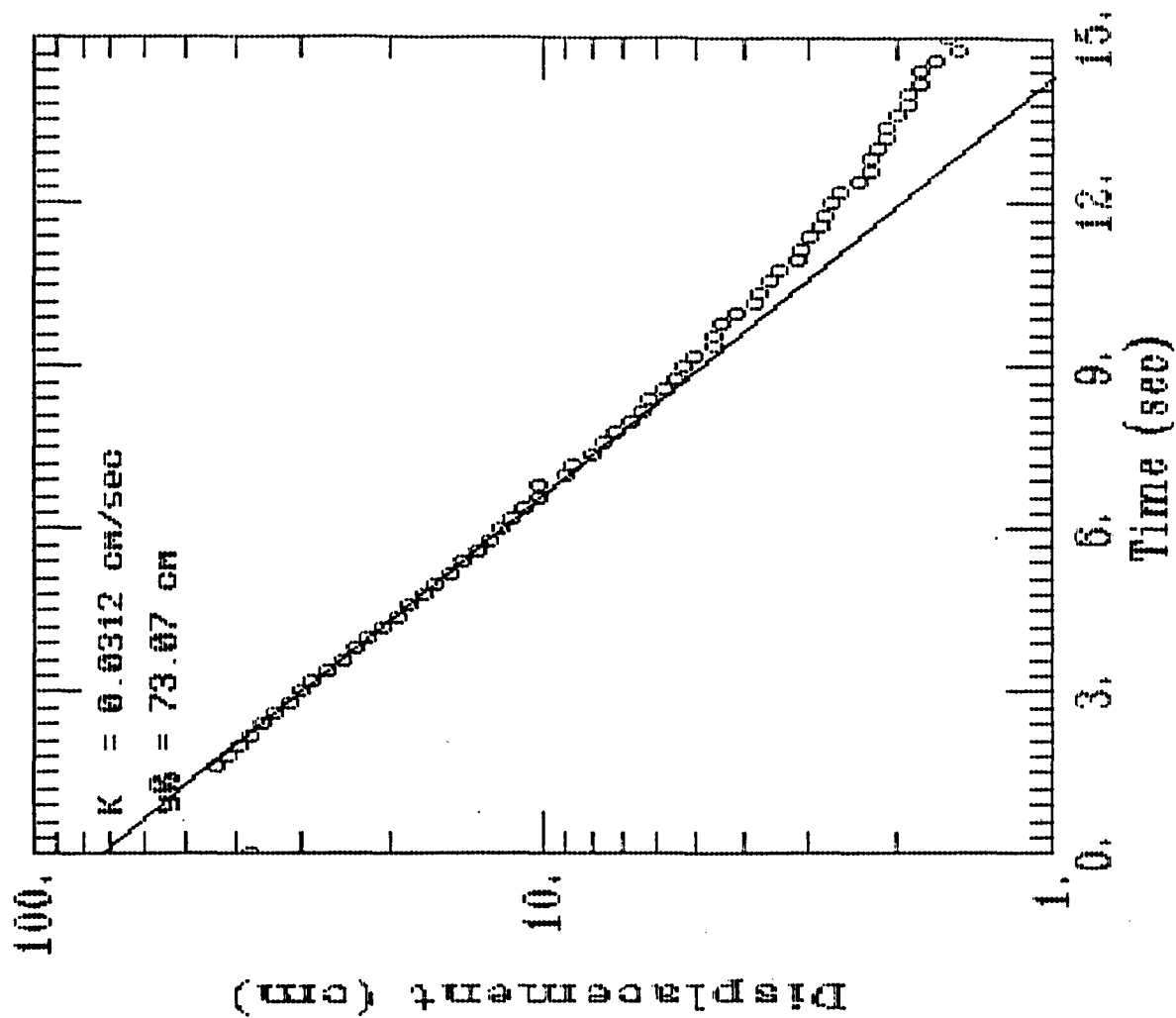
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 K= 0.011 CM/SEC
 BOUWER & RICE:
 K= 0.031 CM/SEC

HVORSLEV:
K= 0.010 CM/SEC
BOUWER & RICE:
K= 0.031 CM/SEC

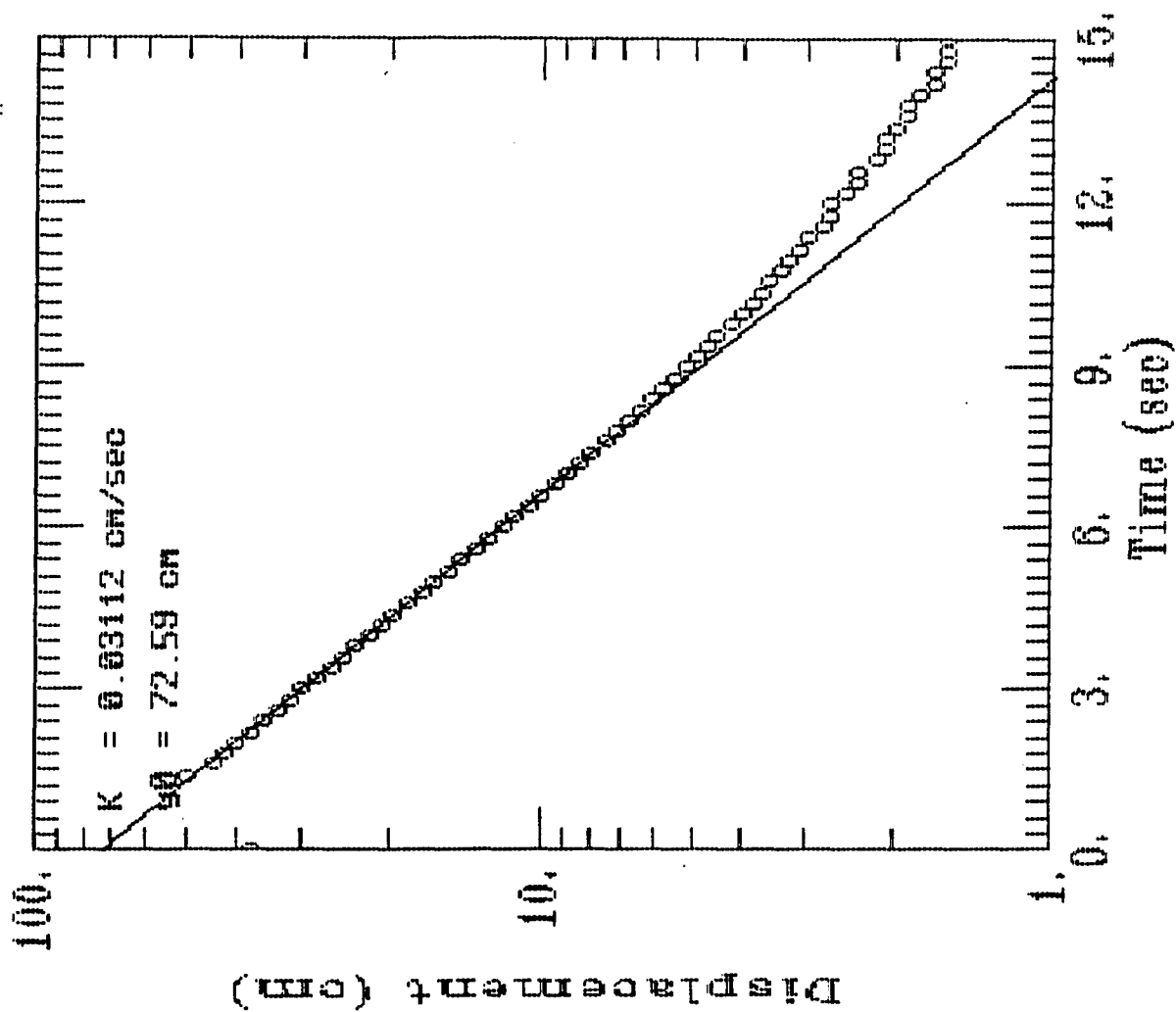
G6M-92-05X PERMEABILITY TESTS



G6M-92-05X PERMEABILITY TEST #1



G6M-92-05X PERMEABILITY TEST #2



WK1
GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	66M-92-05X / 4"
DATE OF TEST	10-06-92
TYPE OF TEST	SLUG OUT RISING HEAD
HERMIT TYPE / SERIAL #	315 10000 / PKC01732
TEST #	SEL 4
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	66.33 (PVC)
WELL DEPTH (FT/TOC)	72.54 (PVC)
XD DEPTH (FT/TOC)	72.00
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	70.0
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 1 OF 2 SLUG: 3' x 3" SOLID PVC ROD	
R. RUSMAN D. PIERCE	

✓ WK1
66 1622

AQUIFER TESTING	
SETUP	
WELL ID	66M-92.05X / 4"
DATE OF TEST	10.06.92.
TYPE OF TEST	Rising Head / SLUGOUT
HERMIT TYPE / SERIAL #	SE1000C / 1K001732
TEST #	SEL # 5
DATA COLLECTION RATE	LOG1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.00 /
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	66.32 (PVC)
WELL DEPTH (FT/TOC)	72.54 (PVC)
XD DEPTH (FT/TOC)	72.00
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	70.00
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 2 of 2	
3' x 3" SLUG Solid PVC Rod	

WELL G6M-02-00X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 6.7 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	0.003
0.0033	0.025
0.0066	1.325
0.01	1.48
0.0133	0.439
0.0166	1.151
0.02	1.723
0.0233	1.484
0.0266	1.385
0.03	1.298
0.0333	1.214
0.0366	1.135
0.04	1.056
0.0433	0.986
0.0466	0.92
0.05	0.853
0.0533	0.793
0.0566	0.743
0.06	0.692
0.0633	0.642
0.0666	0.597
0.07	0.553
0.0733	0.512
0.0766	0.477
0.08	0.445
0.0833	0.414
0.0866	0.382
0.09	0.357
0.0933	0.328
0.0966	0.303
0.1	0.284
0.1033	0.265
0.1066	0.246
0.11	0.23
0.1133	0.211
0.1166	0.196
0.12	0.183
0.1233	0.173
0.1266	0.161
0.13	0.145
0.1333	0.139
0.1366	0.129
0.14	0.12
0.1433	0.113
0.1466	0.107
0.15	0.098
0.1533	0.091
0.1566	0.085
0.16	0.082
0.1633	0.079
0.1666	0.072
0.17	0.069
0.1733	0.063
0.1766	0.06
0.18	0.056
0.1833	0.056
0.1866	0.053
0.19	0.047
0.1933	0.047
0.1966	0.044
0.2	0.044
0.2033	0.041
0.2066	0.037
0.21	0.034
0.2133	0.034
0.2166	0.034
0.22	0.031
0.2233	0.028
0.2266	0.028
0.23	0.028
0.2333	0.028
0.2366	0.025
0.24	0.025
0.2433	0.022
0.2466	0.022
0.25	0.022
0.2533	0.022
0.2566	0.022
0.26	0.018
0.2633	0.018
0.2666	0.018
0.27	0.018
0.2733	0.018
0.2766	0.018
0.28	0.015
0.2833	0.012
0.2866	0.015
0.29	0.015
0.2933	0.015
0.2966	0.012
0.3	0.012
0.3033	0.012
0.3066	0.012
0.31	0.012
0.3133	0.012
0.3166	0.009
0.32	0.009
0.3233	0.012
0.3266	0.012
0.33	0.012
0.3333	0.009
0.35	0.009
0.3666	0.009
0.3833	0.009
0.4	0.009
0.4166	0.009
0.4333	0.009
0.45	0.006
0.4666	0.009
0.4833	0.006
0.5	0.006
0.5166	0.003
0.5333	0.006
0.55	0.006

TEST 2
MINUTES

FEET

0	0.012
0.0033	0.778
0.0066	1.094
0.01	1.48
0.0133	0.784
0.0166	1.556
0.02	1.524
0.0233	1.423
0.0266	1.337
0.03	1.245
0.0333	1.183
0.0366	1.087
0.04	1.015
0.0433	0.945
0.0466	0.879
0.05	0.822
0.0533	0.762
0.0566	0.711
0.06	0.651
0.0633	0.613
0.0666	0.569
0.07	0.525
0.0733	0.48
0.0766	0.452
0.08	0.426
0.0833	0.389
0.0866	0.36
0.09	0.338
0.0933	0.313
0.0966	0.29
0.1	0.271
0.1033	0.253
0.1066	0.234
0.11	0.218
0.1133	0.199
0.1166	0.186
0.12	0.18
0.1233	0.164
0.1266	0.151
0.13	0.139
0.1333	0.129
0.1366	0.123
0.14	0.117
0.1433	0.107
0.1466	0.101
0.15	0.091
0.1533	0.086
0.1566	0.082
0.16	0.079
0.1633	0.072
0.1666	0.066
0.17	0.063
0.1733	0.06
0.1766	0.06
0.18	0.053
0.1833	0.05
0.1866	0.047
0.19	0.044
0.1933	0.044
0.1966	0.041
0.2	0.037
0.2033	0.034
0.2066	0.034
0.21	0.031
0.2133	0.031
0.2166	0.031
0.22	0.028
0.2233	0.025
0.2266	0.025
0.23	0.025
0.2333	0.025
0.2366	0.022
0.24	0.018
0.2433	0.018
0.2466	0.018
0.25	0.018
0.2533	0.018
0.2566	0.018
0.26	0.015
0.2633	0.015
0.2666	0.015
0.27	0.015
0.2733	0.012
0.2766	0.009
0.28	0.012
0.2833	0.012
0.2866	0.012
0.29	0.012
0.2933	0.009
0.2966	0.009
0.3	0.012
0.3033	0.009
0.3066	0.009
0.31	0.009
0.3133	0.009
0.3166	0.009
0.32	0.009
0.3233	0.009
0.3266	0.006
0.33	0.006
0.3333	0.006
0.35	0.006
0.3666	0.006
0.3833	0.003
0.4	0.006
0.4166	0.003
0.4333	0.003
0.45	0.003
0.4666	0.003
0.4833	0.003
0.5	0
0.5166	0.003
0.5333	0
0.55	0.003

0.5666	0.006
0.5833	0.006
0.6	0.003
0.6166	0.006
0.6333	0.003
0.65	0.006
0.6666	0
0.6833	0.006
0.7	0.003
0.7166	0.003
0.7333	0.003
0.75	0.003
0.7666	0.003
0.7833	0.003
0.8	0.003
0.8166	0.003
0.8333	0.006
0.85	0.003
0.8666	0.006
0.8833	0.003
0.9	0.003
0.9166	0.003
0.9333	0.003
0.95	0.003
0.9666	0.003
0.9833	0.003
1	0.003
1.2	0.003
1.4	0.006
1.6	0.006
1.8	0.003
2	0.006
2.2	0.006
2.4	0.003
2.6	0.003
2.8	0.006
3	0.006
3.2	0.006
3.4	0.009
3.6	0.009
3.8	0.006
4	0.006
4.2	0.006

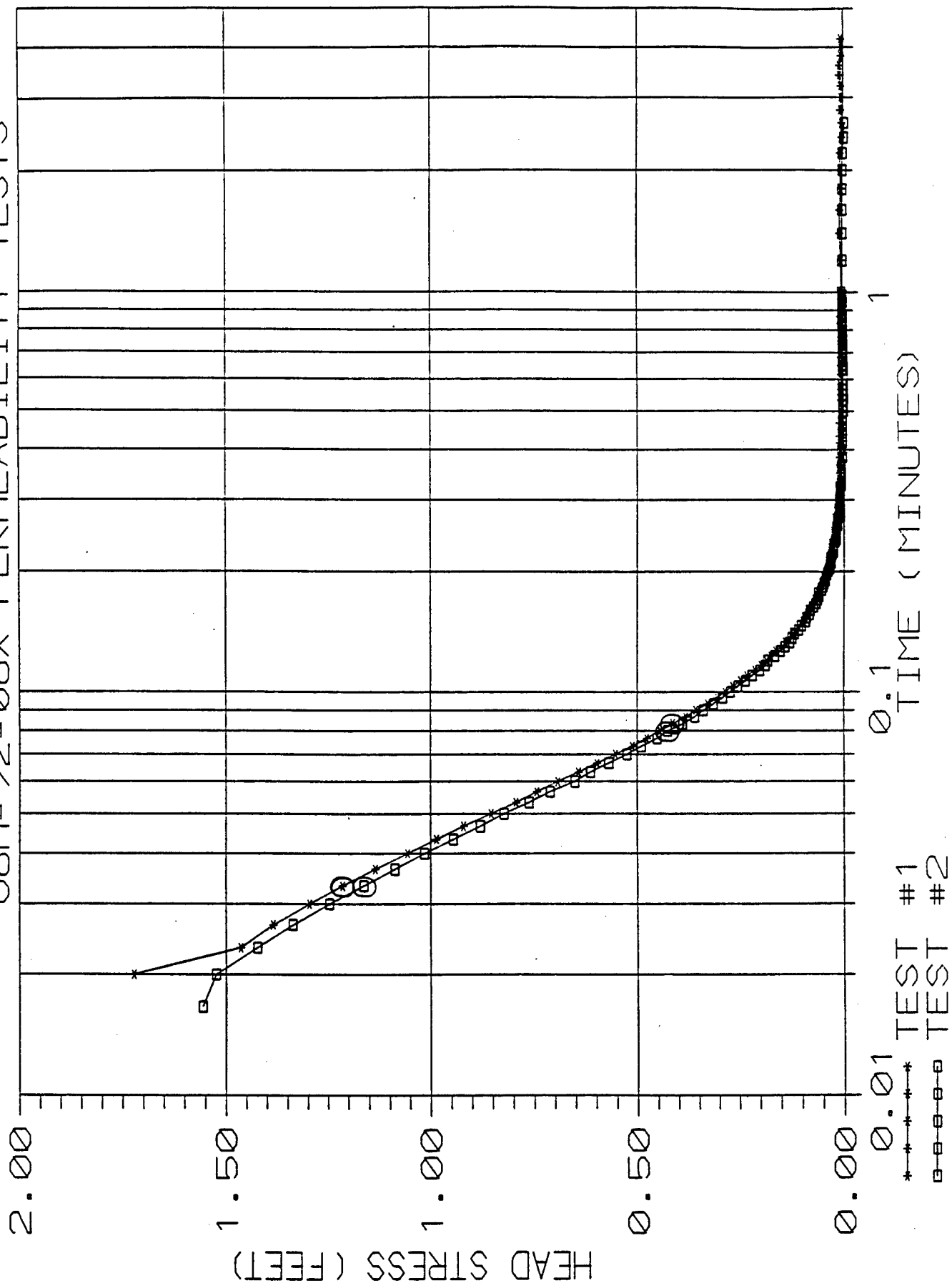
PERMEABILITY TEST RESULTS FOR G6M-92-06X

HVORSLEV:
K= 0.012 CM/SEC
BOUWER & RICE:
K= 0.036 CM/SEC

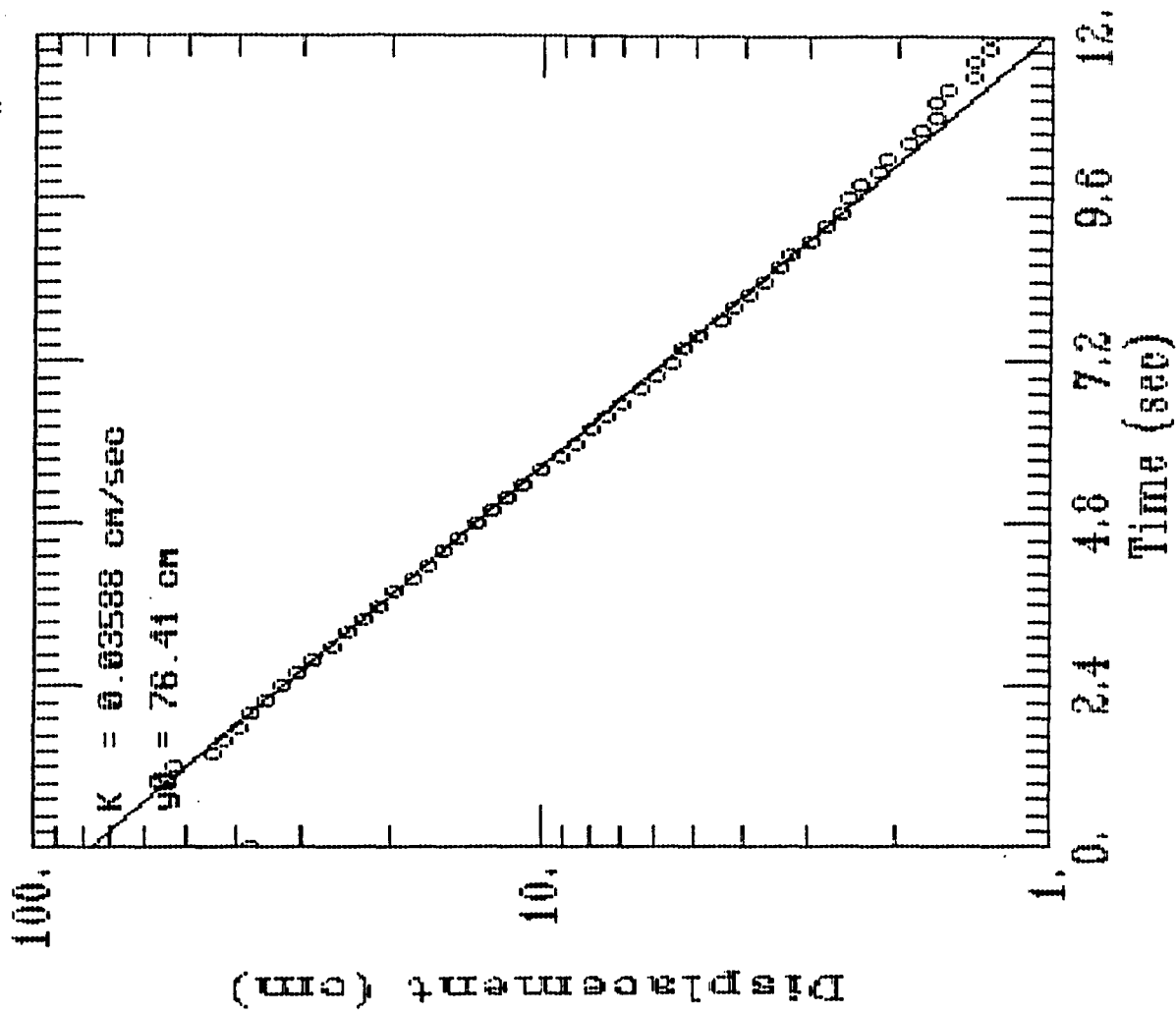
0.5666	0
0.5833	0.003
0.6	0
0.6166	0
0.6333	0.003
0.65	0
0.6666	0.003
0.6833	0
0.7	0.003
0.7166	0
0.7333	0.003
0.75	0
0.7666	0
0.7833	0.003
0.8	0
0.8166	0.003
0.8333	0
0.85	0.003
0.8666	0
0.8833	0.003
0.9	0
0.9166	0
0.9333	0.003
0.95	0
0.9666	0.003
0.9833	0
1	0.003
1.2	0
1.4	0
1.6	0
1.8	0
2	0
2.2	0
2.4	-0.003
2.6	-0.003

HVORSLEV:
K= 0.012 CM/SEC
BOUWER & RICE:
K= 0.036 CM/SEC

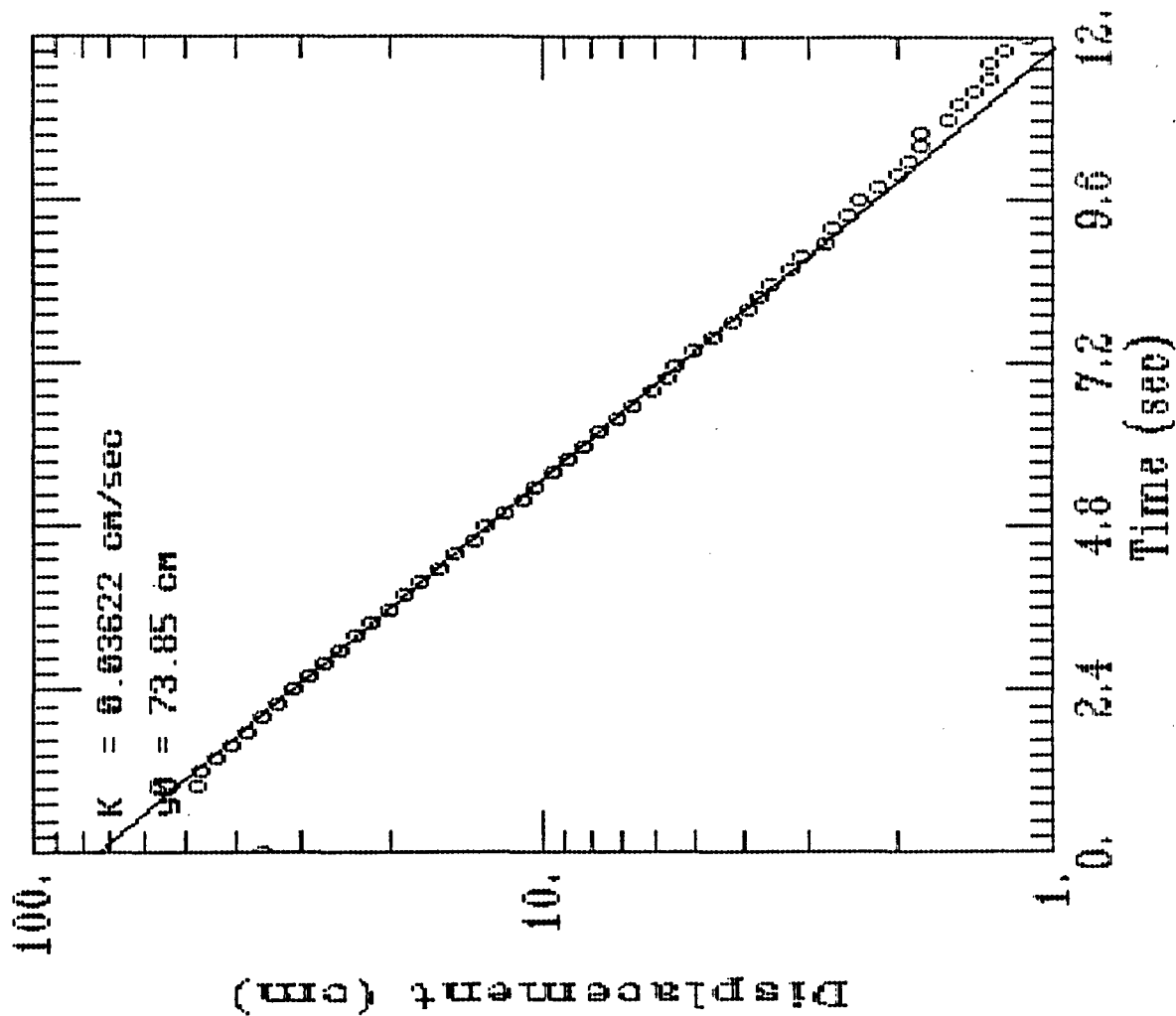
G6M-92-06X PERMEABILITY TESTS



G6M-92-06X PERMEABILITY TEST #1



G6M-92-06X PERMEABILITY TEST #2



✓ WK1
-GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	GGM. 92.06 X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	SLUG OUT / RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000 C / 1KC01732
TEST #	SEL 10
DATA COLLECTION RATE	Log 1
DUCER	
SERIAL #	2046 DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	58.66' (PVC)
WELL DEPTH (FT/TOC)	65.36' (PVC)
XD DEPTH (FT/TOC)	64.36' (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	61.00' (PVC)
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 1 OF 2 SLUG: 3' x 3" Solid Core PVC ROD	

R. RUSMAN
D. PIERCE

✓ well
✓ GRAPU

AQUIFER TESTING	
SETUP	
WELL ID	66M-92-06X / 4"
DATE OF TEST	10.04.92
TYPE OF TEST	Rising Head / SLUG OUT
HERMIT TYPE / SERIAL #	SE1000C / 14601232
TEST #	SEL 11
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	204632
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	58.66 (PVC)
WELL DEPTH (FT/TOC)	65.36 (PVC)
XD DEPTH (FT/TOC)	64.36 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	61.00 (PVC)
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 2 OF 2 SLUG: 3' x 3" SOLID CARC PVC ROD R. RUSAD D. FISKEE	

WELL G6M-92-07X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 7.4 FT. BORING DIAMETER = 0.833 FT

TEST 1 MINUTES	FEET	TEST 2 MINUTES	FEET
0	-0.009	0	-0.009
0.0033	0.493	0.0033	0.05
0.0066	1.461	0.0066	0.92
0.01	0.743	0.01	1.078
0.0133	1.179	0.0133	0.917
0.0166	0.831	0.0166	1.385
0.02	0.183	0.02	0.679
0.0233	0.752	0.0233	0.983
0.0266	1.151	0.0266	0.354
0.03	1.445	0.03	1.344
0.0333	1.334	0.0333	1.42
0.0366	1.227	0.0366	1.28
0.04	1.141	0.04	1.195
0.0433	1.069	0.0433	1.103
0.0466	0.986	0.0466	1.027
0.05	0.914	0.05	0.958
0.0533	0.853	0.0533	0.891
0.0566	0.79	0.0566	0.825
0.06	0.736	0.06	0.765
0.0633	0.688	0.0633	0.714
0.0666	0.638	0.0666	0.664
0.07	0.585	0.07	0.61
0.0733	0.556	0.0733	0.578
0.0766	0.515	0.0766	0.534
0.08	0.48	0.08	0.496
0.0833	0.439	0.0833	0.464
0.0866	0.414	0.0866	0.433
0.09	0.385	0.09	0.404
0.0933	0.36	0.0933	0.37
0.0966	0.335	0.0966	0.351
0.1	0.313	0.1	0.322
0.1033	0.29	0.1033	0.306
0.1066	0.275	0.1066	0.284
0.11	0.256	0.11	0.259
0.1133	0.237	0.1133	0.246
0.1166	0.221	0.1166	0.234
0.12	0.208	0.12	0.218
0.1233	0.196	0.1233	0.205
0.1266	0.18	0.1266	0.192
0.13	0.17	0.13	0.18
0.1333	0.161	0.1333	0.167
0.1366	0.151	0.1366	0.158
0.14	0.142	0.14	0.145
0.1433	0.132	0.1433	0.139
0.1466	0.126	0.1466	0.129
0.15	0.12	0.15	0.126
0.1533	0.11	0.1533	0.117
0.1566	0.104	0.1566	0.113
0.16	0.098	0.16	0.107
0.1633	0.094	0.1633	0.098
0.1666	0.088	0.1666	0.091
0.17	0.082	0.17	0.088
0.1733	0.079	0.1733	0.085
0.1766	0.075	0.1766	0.082
0.18	0.069	0.18	0.072
0.1833	0.066	0.1833	0.072
0.1866	0.063	0.1866	0.069
0.19	0.06	0.19	0.063
0.1933	0.056	0.1933	0.06
0.1966	0.053	0.1966	0.06
0.2	0.05	0.2	0.056
0.2033	0.05	0.2033	0.05
0.2066	0.047	0.2066	0.05
0.21	0.044	0.21	0.05
0.2133	0.041	0.2133	0.047
0.2166	0.041	0.2166	0.041
0.22	0.037	0.22	0.037
0.2233	0.034	0.2233	0.037
0.2266	0.034	0.2266	0.037
0.23	0.034	0.23	0.034
0.2333	0.031	0.2333	0.034
0.2366	0.028	0.2366	0.034
0.24	0.026	0.24	0.031
0.2433	0.026	0.2433	0.028
0.2466	0.026	0.2466	0.028
0.25	0.025	0.25	0.028
0.2533	0.025	0.2533	0.025
0.2566	0.025	0.2566	0.025
0.26	0.022	0.26	0.025
0.2633	0.018	0.2633	0.025
0.2666	0.018	0.2666	0.025
0.27	0.022	0.27	0.022
0.2733	0.018	0.2733	0.022
0.2766	0.018	0.2766	0.018
0.28	0.018	0.28	0.018
0.2833	0.018	0.2833	0.018
0.2866	0.015	0.2866	0.018
0.29	0.012	0.29	0.018
0.2933	0.015	0.2933	0.018
0.2966	0.015	0.2966	0.015
0.3	0.015	0.3	0.015
0.3033	0.012	0.3033	0.015
0.3066	0.012	0.3066	0.015
0.31	0.012	0.31	0.012
0.3133	0.012	0.3133	0.015
0.3166	0.009	0.3166	0.015
0.32	0.009	0.32	0.012
0.3233	0.012	0.3233	0.012
0.3266	0.009	0.3266	0.012
0.33	0.009	0.33	0.012
0.3333	0.009	0.3333	0.012
0.35	0.006	0.35	0.009
0.3666	0.006	0.3666	0.006
0.3833	0.006	0.3833	0.006
0.4	0.003	0.4	0.006
0.4166	0.006	0.4166	0.003
0.4333	0.003	0.4333	0.006
0.45	0.003	0.45	0.003
0.4666	0.003	0.4666	0.003
0.4833	0	0.4833	0.003
0.5	0.003	0.5	0.003
0.5166	0	0.5166	0
0.5333	0	0.5333	0
0.55	0	0.55	0

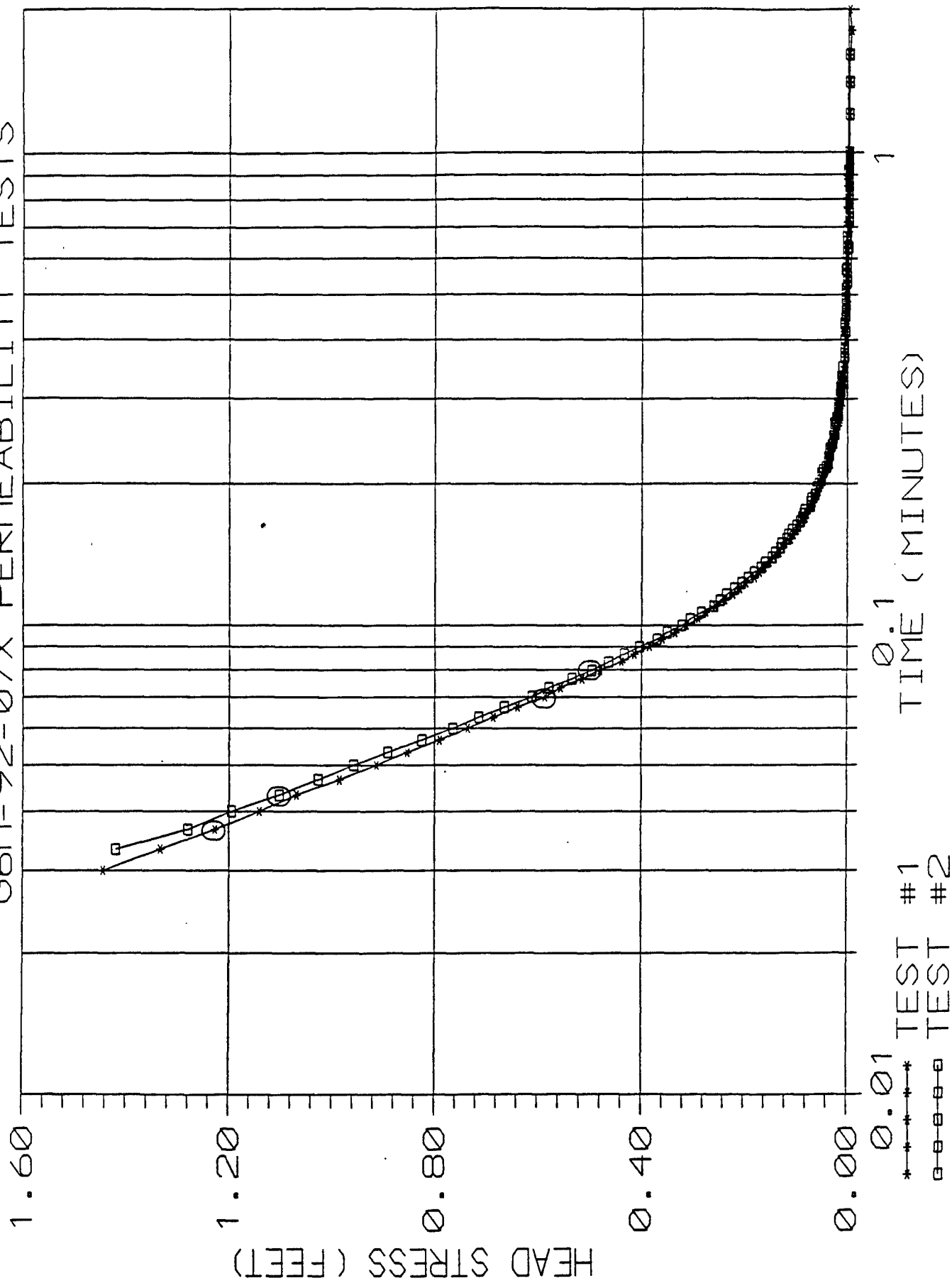
0.5000	0
0.5833	0
0.6	0
0.6166	0
0.6333	0
0.65	-0.003
0.6666	0
0.6833	-0.003
0.7	-0.003
0.7166	0
0.7333	-0.003
0.75	-0.003
0.7666	0
0.7833	-0.003
0.8	0
0.8166	-0.003
0.8333	-0.003
0.85	0
0.8666	-0.003
0.8833	-0.003
0.9	-0.003
0.9166	-0.003
0.9333	-0.003
0.95	-0.003
0.9666	-0.003
0.9833	-0.003
1	-0.003
1.2	-0.003
1.4	-0.003
1.6	-0.003
1.8	-0.006
2	-0.003

PERMEABILITY TEST RESULTS FOR G6M-92-07X
 HVORSLEV:
 K=0.012 CM/SEC
 BOUWER & RICE:
 K= 0.035 CM/SEC

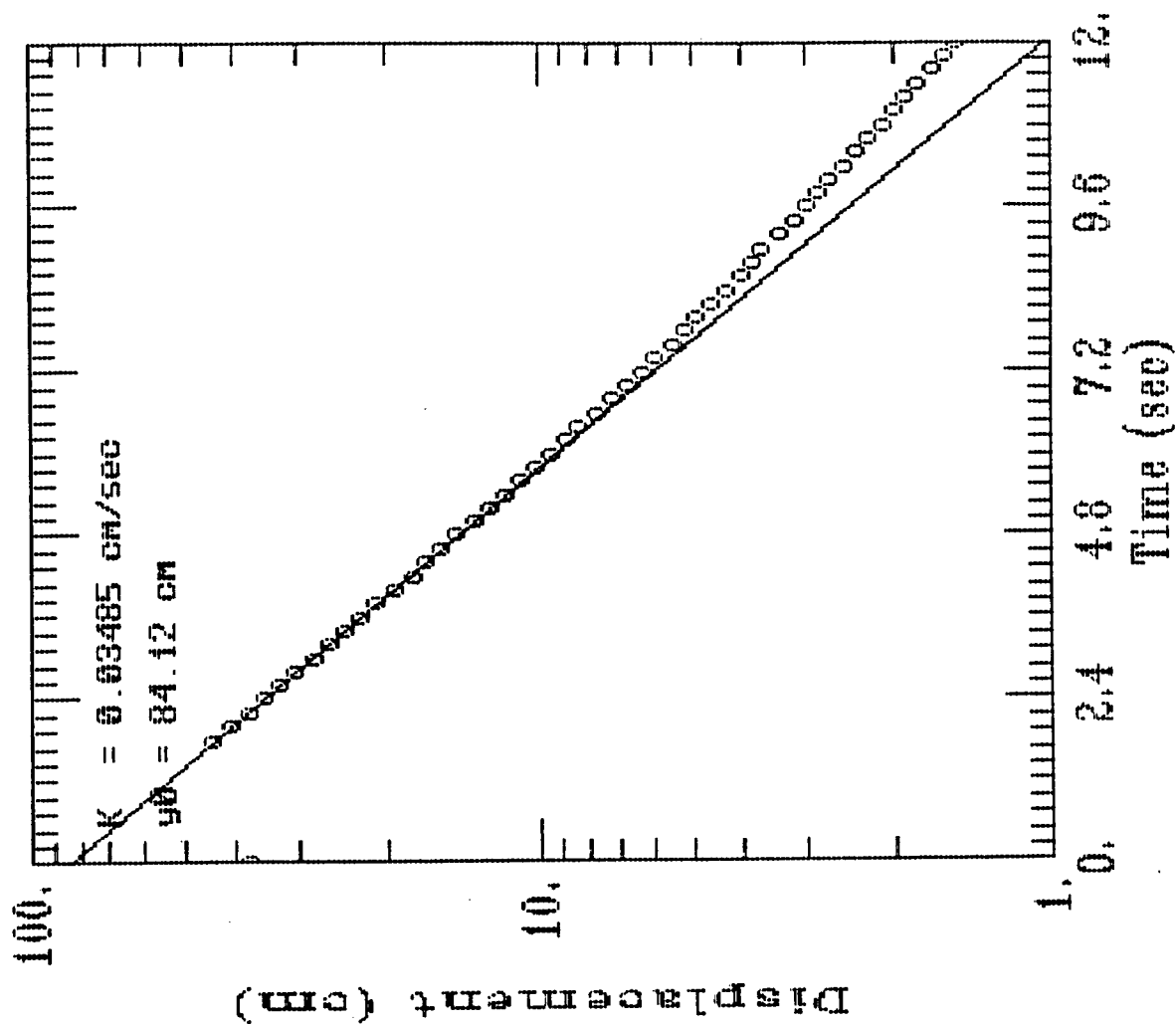
0.5000	0.003
0.5833	0
0.6	0
0.6166	0
0.6333	-0.003
0.65	0
0.6666	0
0.6833	0
0.7	0
0.7166	-0.003
0.7333	-0.003
0.75	-0.003
0.7666	-0.003
0.7833	0
0.8	-0.003
0.8166	-0.003
0.8333	-0.003
0.85	-0.003
0.8666	-0.003
0.8833	-0.003
0.9	0
0.9166	0
0.9333	-0.003
0.95	-0.003
0.9666	-0.003
0.9833	-0.003
1	-0.003
1.2	-0.003
1.4	-0.003
1.6	-0.003

HVORSLEV:
 K= 0.011 CM/SEC
 BOUWER & RICE:
 K= 0.035 CM/SEC

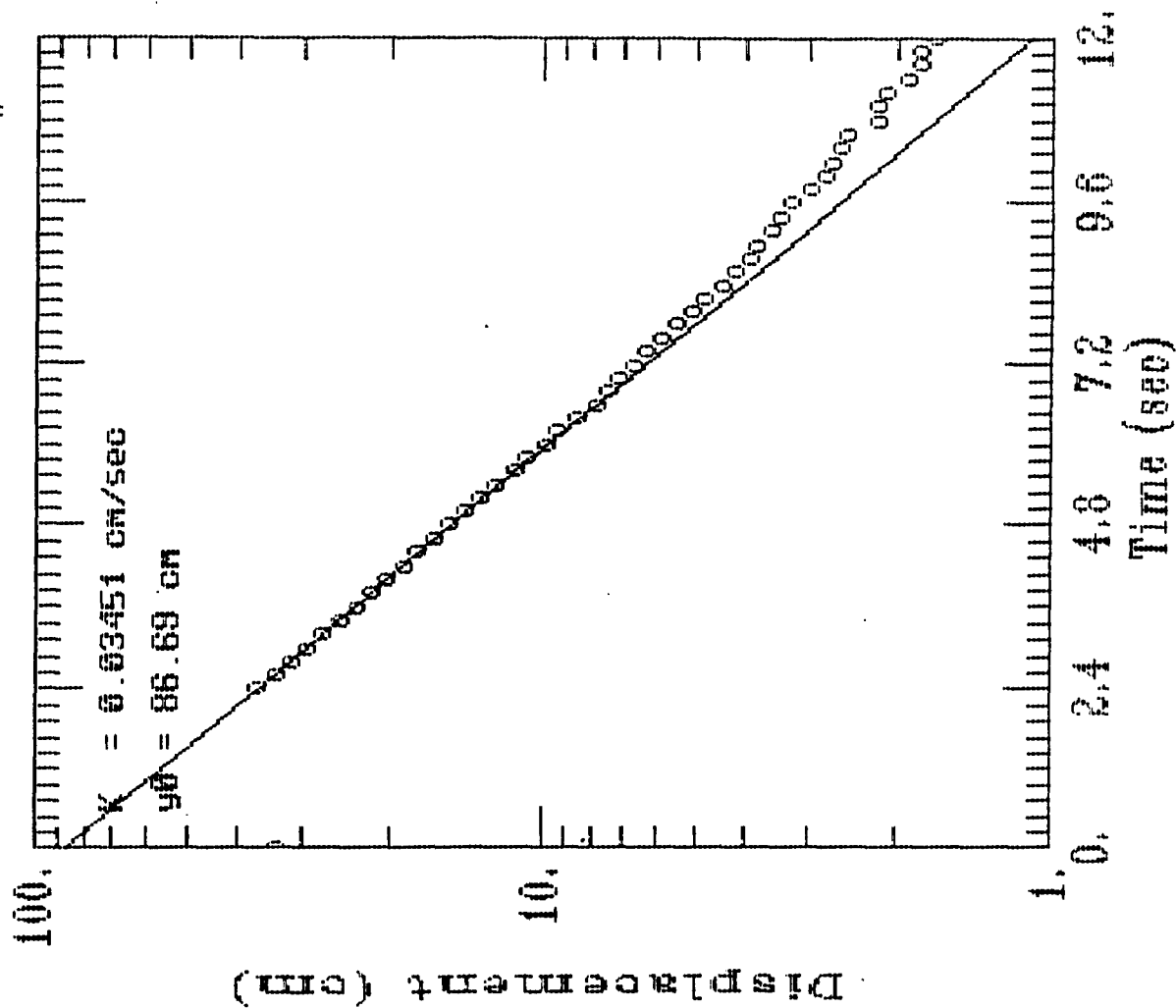
G6M-92-07X PERMEABILITY TESTS



G6M-92-07X PERMEABILITY TEST #1



G6M-92-07X PERMEABILITY TEST #2



✓ 1001
- GRAPU

AQUIFER TESTING	
SETUP	
WELL ID	GGM. 92.072 / 4"
DATE OF TEST	10.6.92
TYPE OF TEST	RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000C / 1KC01732
TEST #	SEL 16 / 1002
DATA COLLECTION RATE	Low 1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	# 1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	60.23 (PVC)
WELL DEPTH (FT/TOC)	67.65 (PVC)
XD DEPTH (FT/TOC)	66.65' (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	65.00 (PVC)
TIME OF SLUG PLACEMENT	-
TIME OF WL EQUILIBRATION	-
NEW XD REFERENCE	-
START TIME OF TEST	-
END TIME OF TEST	-
NOTES: TEST 1 OF 2	
SLUG: 3' x 3" SOLID CORE PVC	
R. ZUSTAD	
D. PIERCE	

✓ WK1
✓ GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	GUM. 92.07X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	RISEING HEAD
HERMIT TYPE / SERIAL #	SE 1000C / 1KCO, 732
TEST #	SEL 17 / 2042
DATA COLLECTION RATE	600 /
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	# 1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	60.23 (PVC)
WELL DEPTH (FT/TOC)	67.65 (PVC)
XD DEPTH (FT/TOC)	66.65 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	65.00 (PVC)
TIME OF SLUG PLACEMENT	—
TIME OF WL EQUILIBRATION	—
NEW XD REFERENCE	—
START TIME OF TEST	—
END TIME OF TEST	—
NOTES: TEST 2 042	
SLUG: 3' x 3" SOLID CORE PVC	
D. PIERCE R. RUSTAD	

WELL G5M-02-08X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 8.0 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	0.373
0.0033	0.562
0.0066	0.490
0.01	0.857
0.0133	0.553
0.0166	-0.088
0.02	0.692
0.0233	1.015
0.0266	0.966
0.03	1.363
0.0333	1.616
0.0366	1.647
0.04	1.945
0.0433	1.856
0.0466	1.774
0.05	1.828
0.0533	1.549
0.0566	1.793
0.06	1.888
0.0633	1.802
0.0666	1.799
0.07	1.771
0.0733	1.764
0.0766	1.745
0.08	1.73
0.0833	1.717
0.0866	1.704
0.09	1.685
0.0933	1.669
0.0966	1.651
0.1	1.632
0.1033	1.616
0.1066	1.597
0.11	1.581
0.1133	1.559
0.1166	1.543
0.12	1.53
0.1233	1.518
0.1266	1.505
0.13	1.489
0.1333	1.477
0.1366	1.461
0.14	1.448
0.1433	1.432
0.1466	1.416
0.15	1.404
0.1533	1.388
0.1566	1.375
0.16	1.36
0.1633	1.347
0.1666	1.334
0.17	1.322
0.1733	1.309
0.1766	1.296
0.18	1.284
0.1833	1.271
0.1866	1.258
0.19	1.246
0.1933	1.233
0.1966	1.22
0.2	1.211
0.2033	1.196
0.2066	1.186
0.21	1.176
0.2133	1.163
0.2166	1.154
0.22	1.141
0.2233	1.132
0.2266	1.119
0.23	1.11
0.2333	1.1
0.2366	1.088
0.24	1.078
0.2433	1.069
0.2466	1.056
0.25	1.046
0.2533	1.037
0.2566	1.027
0.26	1.018
0.2633	1.008
0.2666	0.999
0.27	0.989
0.2733	0.98
0.2766	0.97
0.28	0.961
0.2833	0.952
0.2866	0.945
0.29	0.936
0.2933	0.926
0.2966	0.917
0.3	0.91
0.3033	0.901
0.3066	0.891
0.31	0.885
0.3133	0.878
0.3166	0.866
0.32	0.86
0.3233	0.85
0.3266	0.844
0.33	0.838
0.3333	0.828
0.35	0.79
0.3666	0.749
0.3833	0.714
0.4	0.683
0.4166	0.651
0.4333	0.619
0.45	0.591
0.4666	0.566
0.4833	0.544
0.5	0.521
0.5166	0.499
0.5333	0.48
0.55	0.464

TEST 2
MINUTES

FEET

0	0.136
0.0033	0.711
0.0066	2.017
0.01	0.784
0.0133	0.879
0.0166	1.135
0.02	1.755
0.0233	1.97
0.0266	1.998
0.03	1.957
0.0333	1.938
0.0366	1.919
0.04	1.897
0.0433	1.869
0.0466	1.862
0.05	1.843
0.0533	1.828
0.0566	1.805
0.06	1.78
0.0633	1.764
0.0666	1.749
0.07	1.73
0.0733	1.707
0.0766	1.698
0.08	1.676
0.0833	1.66
0.0866	1.644
0.09	1.625
0.0933	1.609
0.0966	1.597
0.1	1.578
0.1033	1.565
0.1066	1.549
0.11	1.533
0.1133	1.518
0.1166	1.502
0.12	1.489
0.1233	1.473
0.1266	1.458
0.13	1.445
0.1333	1.432
0.1366	1.416
0.14	1.404
0.1433	1.388
0.1466	1.375
0.15	1.363
0.1533	1.35
0.1566	1.337
0.16	1.322
0.1633	1.309
0.1666	1.296
0.17	1.287
0.1733	1.271
0.1766	1.258
0.18	1.249
0.1833	1.236
0.1866	1.224
0.19	1.211
0.1933	1.201
0.1966	1.189
0.2	1.176
0.2033	1.167
0.2066	1.154
0.21	1.144
0.2133	1.132
0.2166	1.122
0.22	1.11
0.2233	1.1
0.2266	1.091
0.23	1.078
0.2333	1.069
0.2366	1.059
0.24	1.05
0.2433	1.04
0.2466	1.027
0.25	1.021
0.2533	1.008
0.2566	0.999
0.26	0.989
0.2633	0.98
0.2666	0.974
0.27	0.964
0.2733	0.955
0.2766	0.945
0.28	0.936
0.2833	0.926
0.2866	0.92
0.29	0.91
0.2933	0.904
0.2966	0.895
0.3	0.885
0.3033	0.879
0.3066	0.869
0.31	0.863
0.3133	0.853
0.3166	0.844
0.32	0.838
0.3233	0.831
0.3266	0.822
0.33	0.816
0.3333	0.809
0.35	0.768
0.3666	0.733
0.3833	0.696
0.4	0.667
0.4166	0.635
0.4333	0.607
0.45	0.578
0.4666	0.556
0.4833	0.531
0.5	0.512
0.5166	0.493
0.5333	0.474
0.55	0.458

0.5666	0.449
0.5833	0.433
0.6	0.417
0.6166	0.404
0.6333	0.395
0.65	0.382
0.6666	0.373
0.6833	0.363
0.7	0.354
0.7166	0.344
0.7333	0.338
0.75	0.328
0.7666	0.322
0.7833	0.316
0.8	0.308
0.8166	0.303
0.8333	0.3
0.85	0.294
0.8666	0.29
0.8833	0.284
0.9	0.281
0.9166	0.278
0.9333	0.272
0.95	0.268
0.9666	0.265
0.9833	0.262
1	0.259
1.2	0.224
1.4	0.205
1.6	0.192
1.8	0.183
2	0.177
2.2	0.17
2.4	0.167
2.6	0.164
2.8	0.161
3	0.161
3.2	0.158
3.4	0.154
3.6	0.154
3.8	0.154
4	0.151
4.2	0.151
4.4	0.151
4.6	0.151
4.8	0.148
5	0.148
5.2	0.145
5.4	0.145
5.6	0.145

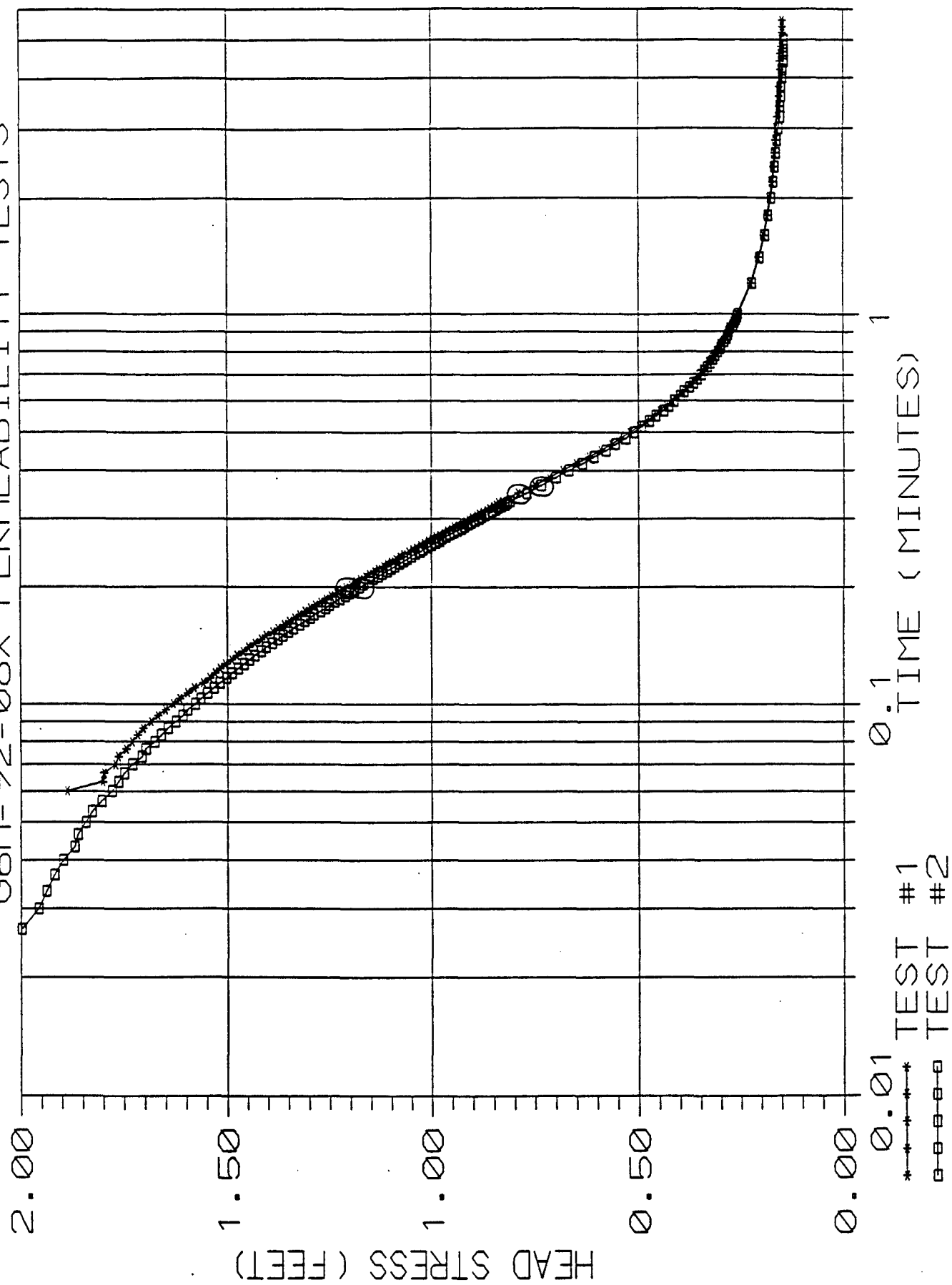
PERMEABILITY TEST RESULTS FOR G6M-02-08X

HVORSLEV:
K= 0.0014 CM/SEC
BOUWER & RICE:
K= 0.0043 CM/SEC

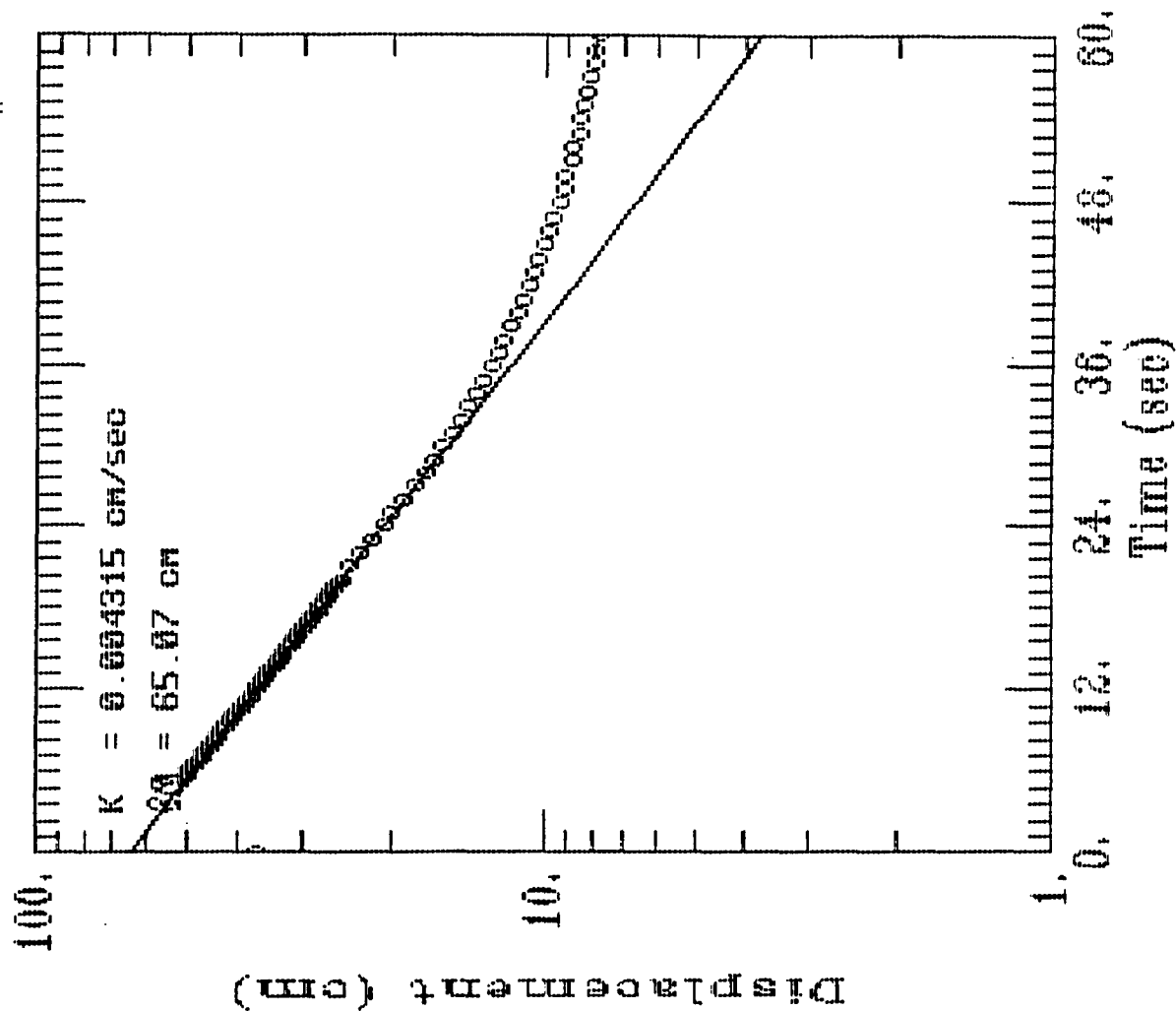
0.5666	0.439
0.5833	0.426
0.6	0.414
0.6166	0.398
0.6333	0.389
0.65	0.378
0.6666	0.368
0.6833	0.357
0.7	0.347
0.7166	0.341
0.7333	0.332
0.75	0.325
0.7666	0.319
0.7833	0.313
0.8	0.306
0.8166	0.3
0.8333	0.297
0.85	0.29
0.8666	0.284
0.8833	0.281
0.9	0.278
0.9166	0.275
0.9333	0.268
0.95	0.265
0.9666	0.262
0.9833	0.259
1	0.256
1.2	0.221
1.4	0.202
1.6	0.189
1.8	0.18
2	0.173
2.2	0.167
2.4	0.164
2.6	0.161
2.8	0.158
3	0.154
3.2	0.151
3.4	0.151
3.6	0.148
3.8	0.148
4	0.145
4.2	0.145
4.4	0.142
4.6	0.142
4.8	0.142
5	0.142

HVORSLEV:
K= 0.0014 CM/SEC
BOUWER & RICE:
K= 0.0043 CM/SEC

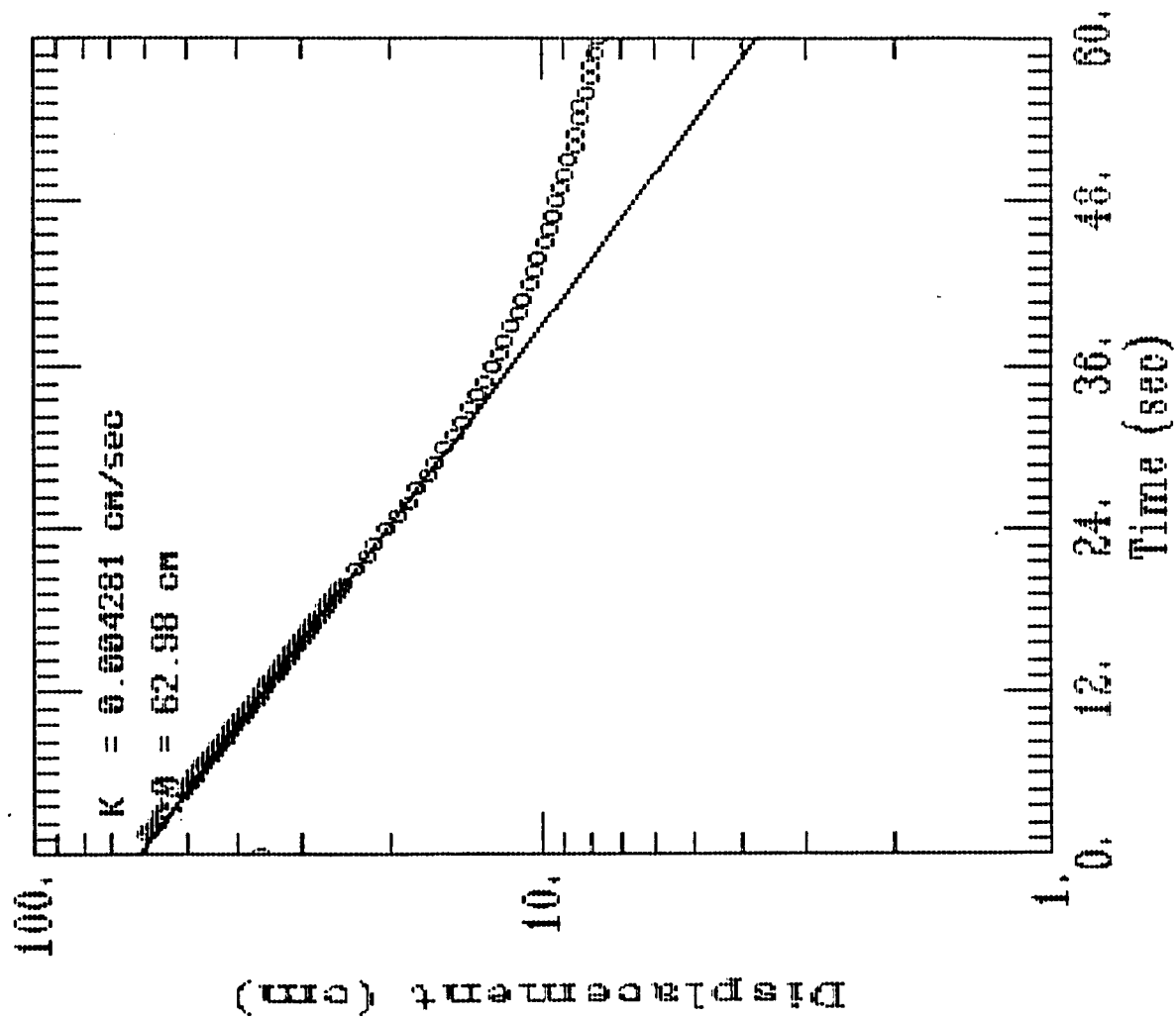
G6M-92-08X PERMEABILITY TESTS



G6M-92-08X PERMEABILITY TEST #1



G6M-92-08X PERMEABILITY TEST #2



1 WK1
GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	66M 92.08X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	RISING HEAD / SLUG OUT
HERMIT TYPE / SERIAL #	SE 1000C / 1K101232
TEST #	SEL 12
DATA COLLECTION RATE	Log 1
DUCER	
SERIAL #	2046152
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	# 1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	54.41 (PVC)
WELL DEPTH (FT/TOC)	62.43 (PVC)
XD DEPTH (FT/TOC)	61.00 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	59.00
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 1 of 2 SLUG: 3' x 3" SOLID CORE PVC ROD R. RUSTAD D. PIERCE	

✓ WK1
✓ CRAPU

AQUIFER TESTING	
SETUP	
WELL ID	66M.92.00X / 4"
DATE OF TEST	10.06.92
TYPE OF TEST	RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000 c / 1260173.2
TEST #	SEL 13
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	2046 DL
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	#1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	54.39
WELL DEPTH (FT/TOC)	62.43
XD DEPTH (FT/TOC)	61.00
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	59.00
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST #2 OF 2 SLUG: 3' x 3" SOLID CORE PVC ROD R. RUSMAN D. PIERCE	

WELL GOM-92-00X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 8.4 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	0.05
0.0033	0.05
0.0066	0.819
0.01	1.565
0.0133	1.315
0.0166	1.138
0.02	1.299
0.0233	1.072
0.0266	1.882
0.03	0.55
0.0333	1.831
0.0366	1.859
0.04	1.856
0.0433	1.853
0.0466	1.828
0.05	1.799
0.0533	1.793
0.0566	1.781
0.06	1.742
0.0633	1.72
0.0666	1.704
0.07	1.688
0.0733	1.873
0.0766	1.899
0.08	1.828
0.0833	1.841
0.0866	1.808
0.09	1.8
0.0933	1.581
0.0966	1.565
0.1	1.558
0.1033	1.524
0.1066	1.527
0.11	1.502
0.1133	1.488
0.1166	1.488
0.12	1.473
0.1233	1.464
0.1266	1.451
0.13	1.423
0.1333	1.42
0.1366	1.416
0.14	1.394
0.1433	1.372
0.1466	1.383
0.15	1.356
0.1533	1.331
0.1566	1.331
0.16	1.315
0.1633	1.303
0.1666	1.296
0.17	1.28
0.1733	1.271
0.1766	1.258
0.18	1.246
0.1833	1.233
0.1866	1.224
0.19	1.211
0.1933	1.201
0.1966	1.189
0.2	1.179
0.2033	1.17
0.2066	1.151
0.21	1.148
0.2133	1.138
0.2166	1.119
0.22	1.113
0.2233	1.108
0.2266	1.097
0.23	1.084
0.2333	1.075
0.2366	1.065
0.24	1.056
0.2433	1.046
0.2466	1.037
0.25	1.027
0.2533	1.018
0.2566	1.008
0.26	0.999
0.2633	0.993
0.2666	0.983
0.27	0.974
0.2733	0.964
0.2766	0.955
0.28	0.945
0.2833	0.939
0.2866	0.929
0.29	0.92
0.2933	0.914
0.2966	0.904
0.3	0.898
0.3033	0.888
0.3066	0.879
0.31	0.872
0.3133	0.866
0.3166	0.857
0.32	0.85
0.3233	0.838
0.3266	0.834
0.33	0.825
0.3333	0.819
0.35	0.784
0.3666	0.743
0.3833	0.705
0.4	0.67
0.4166	0.638
0.4333	0.607
0.45	0.581
0.4666	0.553
0.4833	0.531
0.5	0.508
0.5166	0.483
0.5333	0.461
0.55	0.442

TEST 2
MINUTES

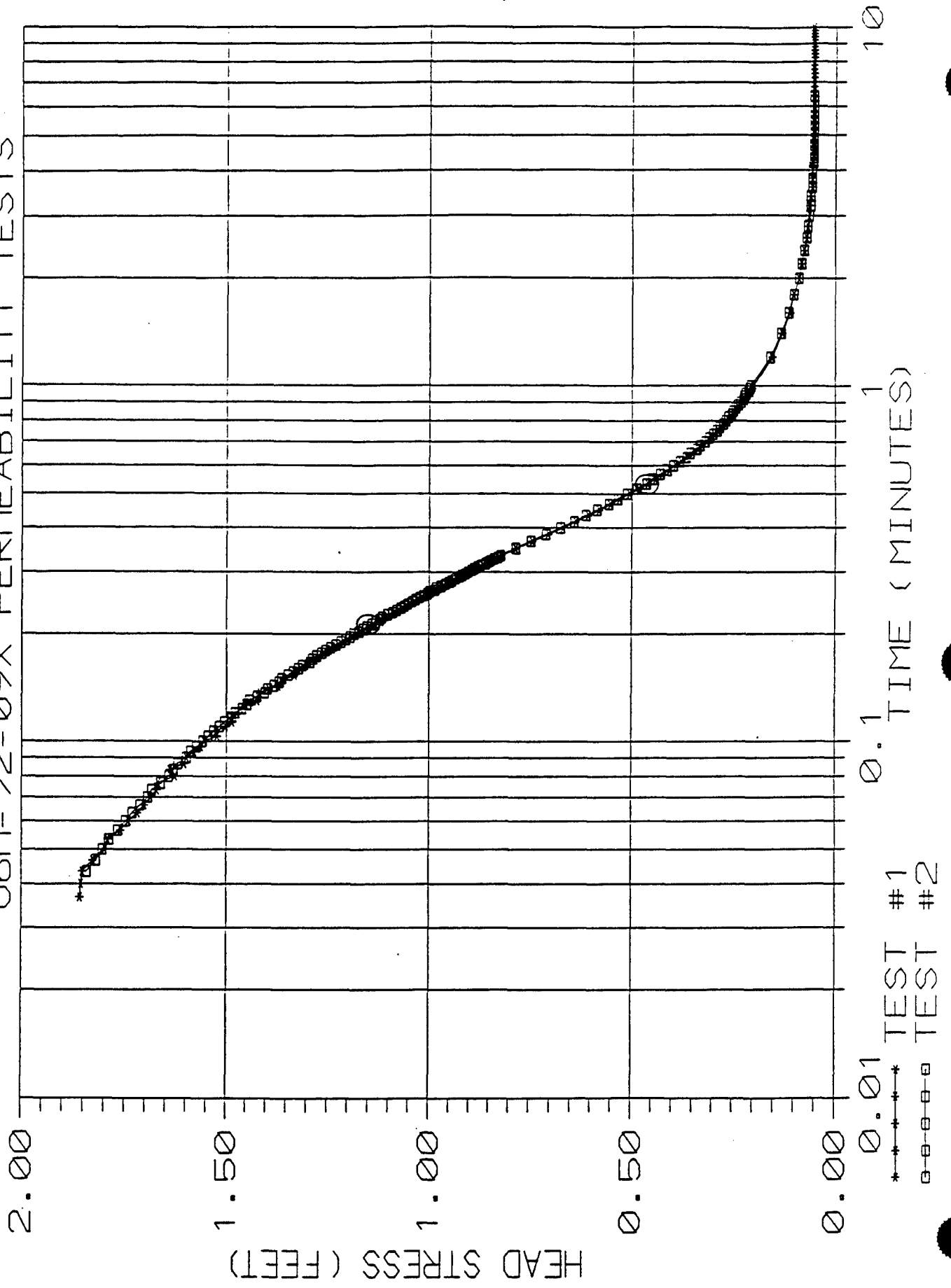
FEET

0	0.05
0.0033	0.18
0.0066	0.782
0.01	2.141
0.0133	0.907
0.0166	0.88
0.02	1.056
0.0233	0.439
0.0266	1.106
0.03	1.47
0.0333	2.109
0.0366	1.802
0.04	1.84
0.0433	1.843
0.0466	1.821
0.05	1.805
0.0533	1.79
0.0566	1.768
0.06	1.749
0.0633	1.733
0.0666	1.714
0.07	1.695
0.0733	1.685
0.0766	1.663
0.08	1.644
0.0833	1.632
0.0866	1.622
0.09	1.6
0.0933	1.59
0.0966	1.575
0.1	1.559
0.1033	1.546
0.1066	1.533
0.11	1.518
0.1133	1.505
0.1166	1.486
0.12	1.477
0.1233	1.461
0.1266	1.448
0.13	1.442
0.1333	1.423
0.1366	1.404
0.14	1.397
0.1433	1.382
0.1466	1.369
0.15	1.363
0.1533	1.347
0.1566	1.334
0.16	1.322
0.1633	1.312
0.1666	1.293
0.17	1.287
0.1733	1.277
0.1766	1.265
0.18	1.255
0.1833	1.243
0.1866	1.23
0.19	1.217
0.1933	1.205
0.1966	1.195
0.2	1.186
0.2033	1.173
0.2066	1.163
0.21	1.154
0.2133	1.141
0.2166	1.132
0.22	1.122
0.2233	1.116
0.2266	1.103
0.23	1.091
0.2333	1.081
0.2366	1.069
0.24	1.062
0.2433	1.053
0.2466	1.043
0.25	1.034
0.2533	1.024
0.2566	1.015
0.26	1.005
0.2633	0.999
0.2666	0.988
0.27	0.983
0.2733	0.971
0.2766	0.961
0.28	0.952
0.2833	0.945
0.2866	0.936
0.29	0.926
0.2933	0.92
0.2966	0.91
0.3	0.904
0.3033	0.895
0.3066	0.888
0.31	0.879
0.3133	0.872
0.3166	0.86
0.32	0.853
0.3233	0.847
0.3266	0.838
0.33	0.828
0.3333	0.822
0.35	0.784
0.3666	0.746
0.3833	0.711
0.4	0.678
0.4166	0.642
0.4333	0.613
0.45	0.585
0.4666	0.556
0.4833	0.534
0.5	0.512
0.5166	0.487
0.5333	0.464
0.55	0.449

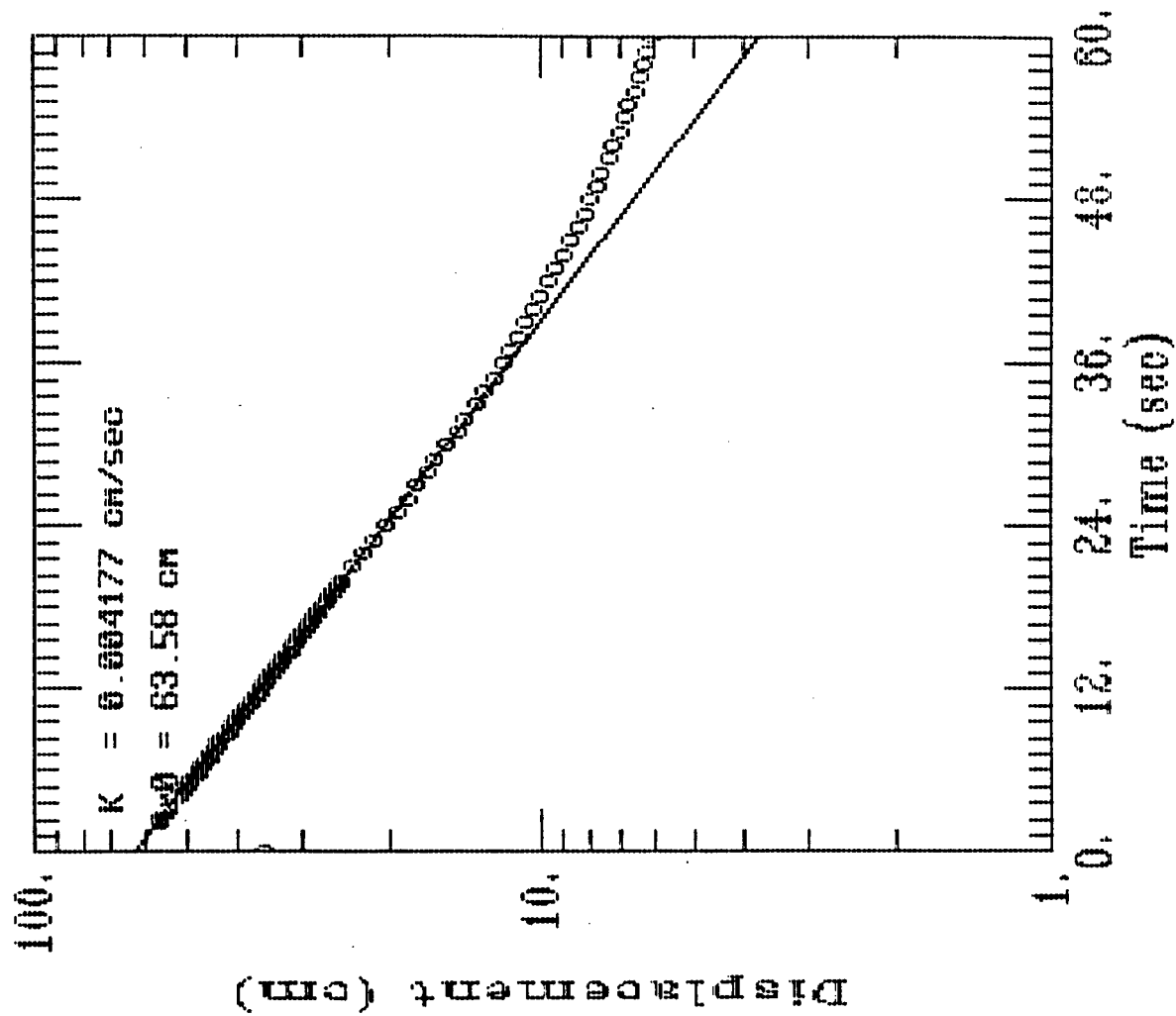
[illegible][illegible]

HVORSLEV:
K=0.0013 CM/SEC
BOUWER & RICE:
K= 0.0042 CM/SEC

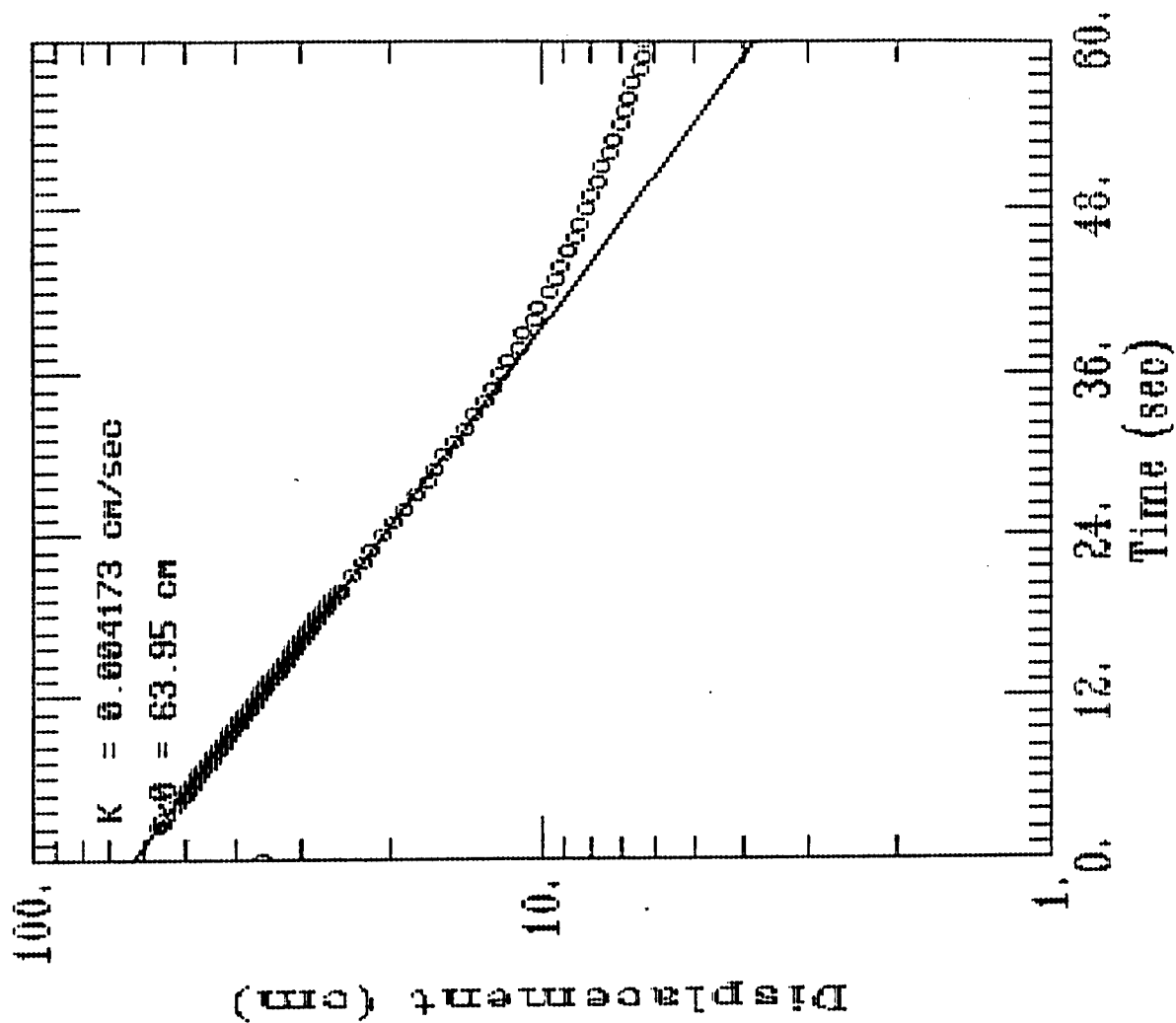
G6M-92-09X PERMEABILITY TESTS



G6M-92-09X PERMEABILITY TEST #1



G6M-92-09X PERMEABILITY TEST #2



WK1
GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	GLM-92.09X 1/4"
DATE OF TEST	10.06.92
TYPE OF TEST	Rising Head
HERMIT TYPE / SERIAL #	SE 1000C / 1KC01732
TEST #	SEL 14
DATA COLLECTION RATE	Log 1
DUCER	
SERIAL #	2046DE
PSIG	10
SCALE FACTOR	10.000
OFFSET	-0.034
INPUT CHANNEL	# 1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	51.70 (PVC)
WELL DEPTH (FT/TOC)	60.10 (PVC)
XD DEPTH (FT/TOC)	59.00 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	57.00 (PVC)
TIME OF SLUG PLACEMENT	
TIME OF WL EQUILIBRATION	
NEW XD REFERENCE	
START TIME OF TEST	
END TIME OF TEST	
NOTES: TEST 1 of 2 slug: 3' x 3" Solid Core PVC Rod R. RUSFAD D. PIERCE	

VW1
GRAPH

AQUIFER TESTING	
SETUP	
WELL ID	66M.92.09K / 4"
DATE OF TEST	10.06.92.
TYPE OF TEST	RISING HEAD
HERMIT TYPE / SERIAL #	SE 1000C / 1KCO1232
TEST #	SEL 15
DATA COLLECTION RATE	LOG 1
DUCER	
SERIAL #	2046 DE
PSIG	10
SCALE FACTOR	10.001
OFFSET	-0.034
INPUT CHANNEL	# 1
TEST DATA	
INPUT MODE (TOC/SUR)	TOC
STATIC WATER LEVEL (FT/TOC)	51.68 (PVC)
WELL DEPTH (FT/TOC)	60.10 (PVC)
XD DEPTH (FT/TOC)	59.00 (PVC)
INITIAL XD REFERENCE	0.00
SLUG DEPTH (FT/TOC)	57.00 (PVC)
TIME OF SLUG PLACEMENT	—
TIME OF WL EQUILIBRATION	—
NEW XD REFERENCE	—
— START TIME OF TEST	—
END TIME OF TEST	—
NOTES: TEST 2 OF 2	
SLUG: 3' x 3" SLUG CORE PVC	
R. RUSTAD D. PIERCE	

* DURING THIS TEST A HELICOPTER FLEW CLOSE
BY THE WELL: ~ 2.5 MIN INTO THE TEST.
HEAVY NOISE VIBRATIONS

WELL G6M-02-10X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 6.5 FT. BORING DIAMETER = 0.833 FT

TEST 1
MINUTES

FEET

0	0.184
0.0033	0.29
0.0066	1.341
0.01	1.385
0.0133	1.397
0.0166	0.936
0.02	0.385
0.0233	1.546
0.0266	2.066
0.03	2.115
0.0333	2.083
0.0366	2.071
0.04	2.062
0.0433	2.052
0.0466	2.046
0.05	2.036
0.0533	2.027
0.0566	2.024
0.06	2.008
0.0633	2.002
0.0666	1.995
0.07	1.983
0.0733	1.973
0.0766	1.964
0.08	1.954
0.0833	1.945
0.0866	1.936
0.09	1.941
0.0933	1.922
0.0966	1.913
0.1	1.926
0.1033	1.891
0.1066	1.881
0.11	1.856
0.1133	1.869
0.1166	1.862
0.12	1.85
0.1233	1.859
0.1266	1.812
0.13	1.837
0.1333	1.847
0.1366	1.821
0.14	1.805
0.1433	1.802
0.1466	1.805
0.15	1.766
0.1533	1.777
0.1566	1.774
0.16	1.749
0.1633	1.758
0.1666	1.774
0.17	1.73
0.1733	1.733
0.1766	1.736
0.18	1.723
0.1833	1.711
0.1866	1.714
0.19	1.696
0.1933	1.686
0.1966	1.679
0.2	1.676
0.2033	1.682
0.2066	1.657
0.21	1.66
0.2133	1.654
0.2166	1.647
0.22	1.619
0.2233	1.628
0.2266	1.622
0.23	1.597
0.2333	1.597
0.2366	1.6
0.24	1.581
0.2433	1.581
0.2466	1.584
0.25	1.564
0.2533	1.571
0.2566	1.571
0.26	1.559
0.2633	1.552
0.2666	1.552
0.27	1.537
0.2733	1.533
0.2766	1.521
0.28	1.511
0.2833	1.514
0.2866	1.511
0.29	1.505
0.2933	1.499
0.2966	1.499
0.3	1.492
0.3033	1.48
0.3066	1.477
0.31	1.473
0.3133	1.467
0.3166	1.461
0.32	1.461
0.3233	1.451
0.3266	1.442
0.33	1.439
0.3333	1.432
0.35	1.404
0.3666	1.375
0.3833	1.359
0.4	1.325
0.4166	1.303
0.4333	1.277
0.45	1.255
0.4666	1.236
0.4833	1.217
0.5	1.195
0.5166	1.182
0.5333	1.167
0.55	1.151

TEST 2
MINUTES

FEET

0	0.126
0.0033	0.136
0.0066	1.647
0.01	3.121
0.0133	1.59
0.0166	1.04
0.02	1.992
0.0233	2.065
0.0266	2.062
0.03	2.071
0.0333	2.03
0.0366	2.049
0.04	2.036
0.0433	2.036
0.0466	2.03
0.05	2.021
0.0533	2.006
0.0566	2.002
0.06	1.986
0.0633	1.979
0.0666	1.973
0.07	1.96
0.0733	1.954
0.0766	1.976
0.08	1.973
0.0833	1.935
0.0866	1.928
0.09	1.913
0.0933	1.881
0.0966	1.91
0.1	1.954
0.1033	1.856
0.1066	1.881
0.11	1.885
0.1133	1.859
0.1166	1.853
0.12	1.85
0.1233	1.843
0.1266	1.837
0.13	1.831
0.1333	1.821
0.1366	1.815
0.14	1.805
0.1433	1.799
0.1466	1.793
0.15	1.783
0.1533	1.78
0.1566	1.771
0.16	1.767
0.1633	1.756
0.1666	1.752
0.17	1.742
0.1733	1.736
0.1766	1.73
0.18	1.723
0.1833	1.72
0.1866	1.711
0.19	1.707
0.1933	1.701
0.1966	1.692
0.2	1.685
0.2033	1.679
0.2066	1.673
0.21	1.669
0.2133	1.66
0.2166	1.654
0.22	1.647
0.2233	1.641
0.2266	1.635
0.23	1.628
0.2333	1.619
0.2366	1.613
0.24	1.606
0.2433	1.606
0.2466	1.6
0.25	1.597
0.2533	1.594
0.2566	1.584
0.26	1.578
0.2633	1.578
0.2666	1.568
0.27	1.562
0.2733	1.552
0.2766	1.549
0.28	1.537
0.2833	1.543
0.2866	1.533
0.29	1.527
0.2933	1.524
0.2966	1.537
0.3	1.514
0.3033	1.505
0.3066	1.502
0.31	1.505
0.3133	1.489
0.3166	1.486
0.32	1.485
0.3233	1.48
0.3266	1.47
0.33	1.467
0.3333	1.445
0.35	1.432
0.3666	1.404
0.3833	1.388
0.4	1.356
0.4166	1.337
0.4333	1.315
0.45	1.296
0.4666	1.277
0.4833	1.258
0.5	1.239
0.5166	1.227
0.5333	1.211
0.55	1.195

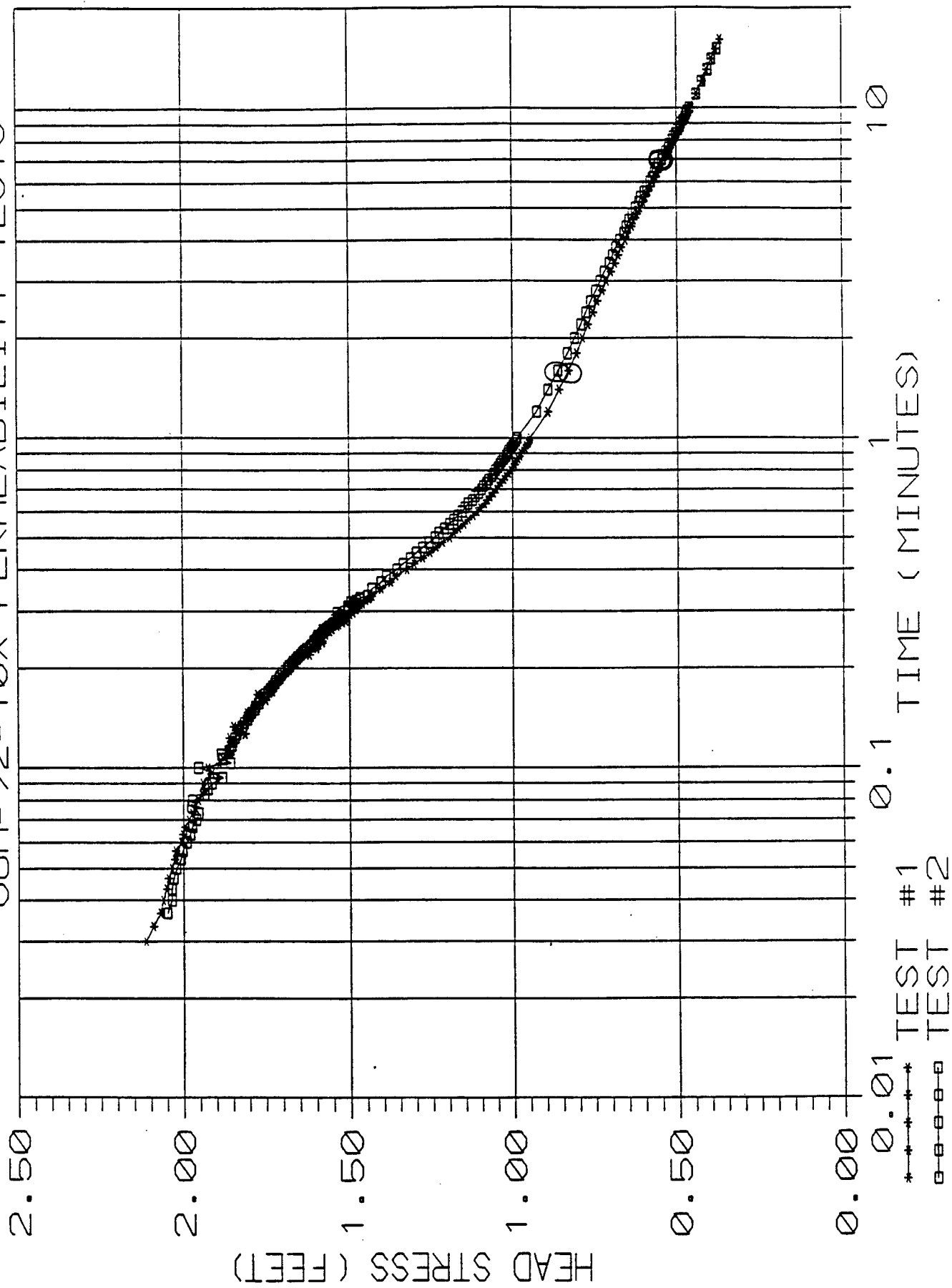
0.5666	1.136
0.5833	1.122
0.6	1.11
0.6166	1.1
0.6333	1.087
0.65	1.078
0.6666	1.069
0.6833	1.059
0.7	1.05
0.7166	1.043
0.7333	1.037
0.75	1.027
0.7666	1.021
0.7833	1.012
0.8	1.005
0.8166	0.999
0.8333	0.993
0.85	0.989
0.8666	0.983
0.8833	0.977
0.9	0.974
0.9166	0.967
0.9333	0.961
0.95	0.958
0.9666	0.951
0.9833	0.946
1	0.945
1.2	0.891
1.4	0.857
1.6	0.828
1.8	0.803
2	0.784
2.2	0.768
2.4	0.752
2.6	0.74
2.8	0.724
3	0.711
3.2	0.696
3.4	0.686
3.6	0.678
3.8	0.667
4	0.654
4.2	0.648
4.4	0.635
4.6	0.629
4.8	0.619
5	0.61
5.2	0.6
5.4	0.594
5.6	0.585
5.8	0.578
6	0.572
6.2	0.562
6.4	0.556
6.6	0.55
6.8	0.544
7	0.537
7.2	0.531
7.4	0.525
7.6	0.518
7.8	0.515
8	0.509
8.2	0.502
8.4	0.496
8.6	0.493
8.8	0.487
9	0.48
9.2	0.477
9.4	0.474
9.6	0.468
9.8	0.461
10	0.458
11	0.439
12	0.42
13	0.407
14	0.392
15	0.379
16	0.368

PERMEABILITY TEST RESULTS FOR G8M-92-10X
 HVORSLEV:
 K= 0.000045 CM/SEC
 BOUWER & RICE:
 K= 0.00013 CM/SEC

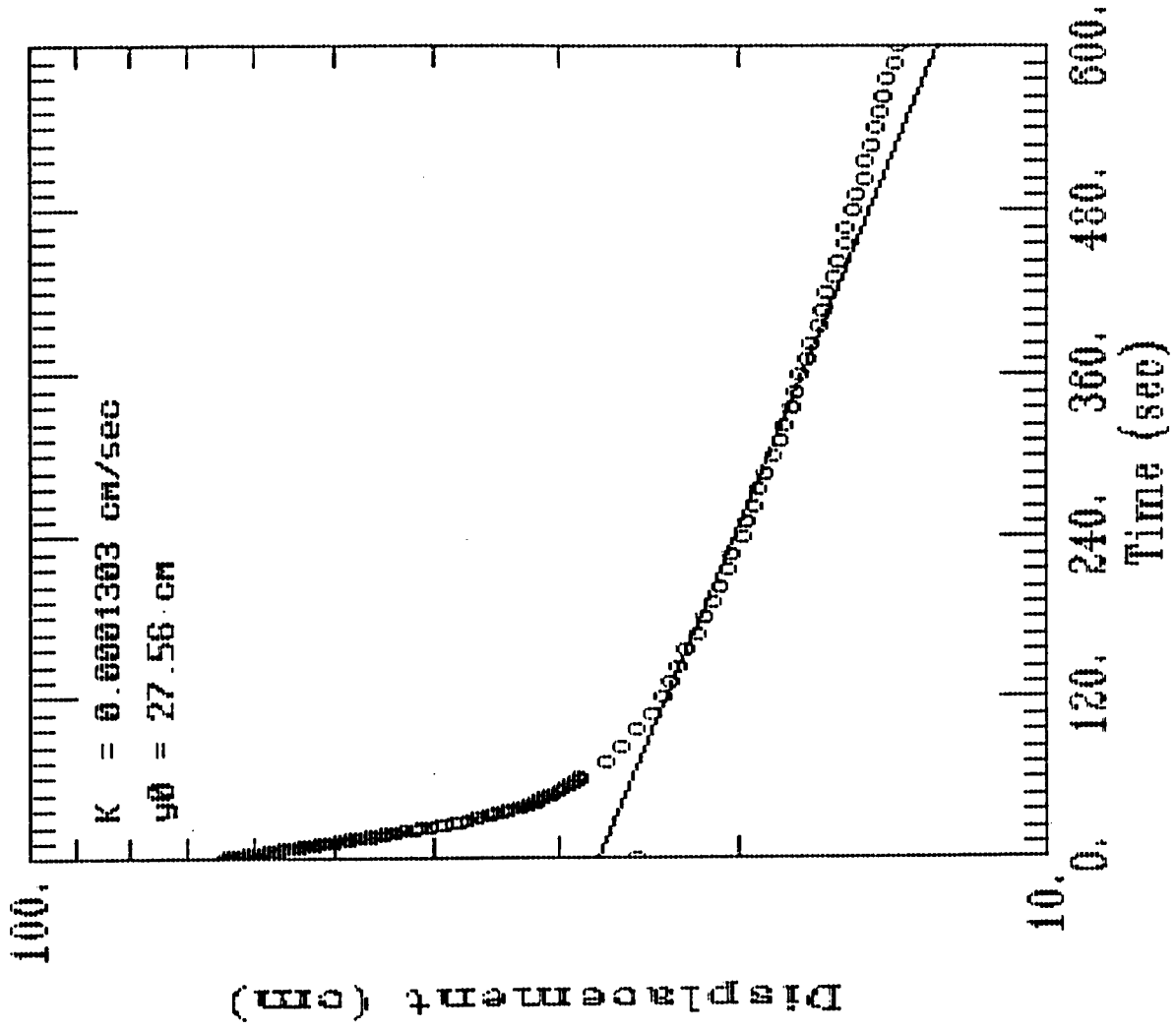
3.5666	1.182
3.5833	1.17
3.6	1.157
3.6166	1.148
3.6333	1.138
3.65	1.125
3.6666	1.116
3.6833	1.108
3.7	1.097
3.7166	1.091
3.7333	1.081
3.75	1.073
3.7666	1.065
3.7833	1.059
3.8	1.053
3.8166	1.048
3.8333	1.04
3.85	1.034
3.8666	1.027
3.8833	1.021
3.9	1.015
3.9166	1.012
3.9333	1.005
3.95	0.999
3.9666	0.996
3.9833	0.999
4	0.996
4.2	0.926
4.4	0.891
4.6	0.86
4.8	0.831
5	0.809
5.2	0.79
5.4	0.774
5.6	0.759
5.8	0.743
6	0.73
6.2	0.717
6.4	0.702
6.6	0.692
6.8	0.683
7	0.67
7.2	0.657
7.4	0.651
7.6	0.642
7.8	0.632
8	0.623
8.2	0.613
8.4	0.607
8.6	0.597
8.8	0.588
9	0.578
9.2	0.572
9.4	0.566
9.6	0.559
9.8	0.553
10	0.544
10.2	0.54
10.4	0.531
10.6	0.525
10.8	0.521
11	0.515
11.2	0.508
11.4	0.502
11.6	0.496
11.8	0.49
12	0.487
12.2	0.48
12.4	0.474
12.6	0.471
12.8	0.468
13	0.461
13.2	0.439
13.4	0.423
13.6	0.404
13.8	0.392
14	0.376

HVORSLEV:
 K= 0.000046 CM/SEC
 BOUWER & RICE:
 K= 0.00014 CM/SEC

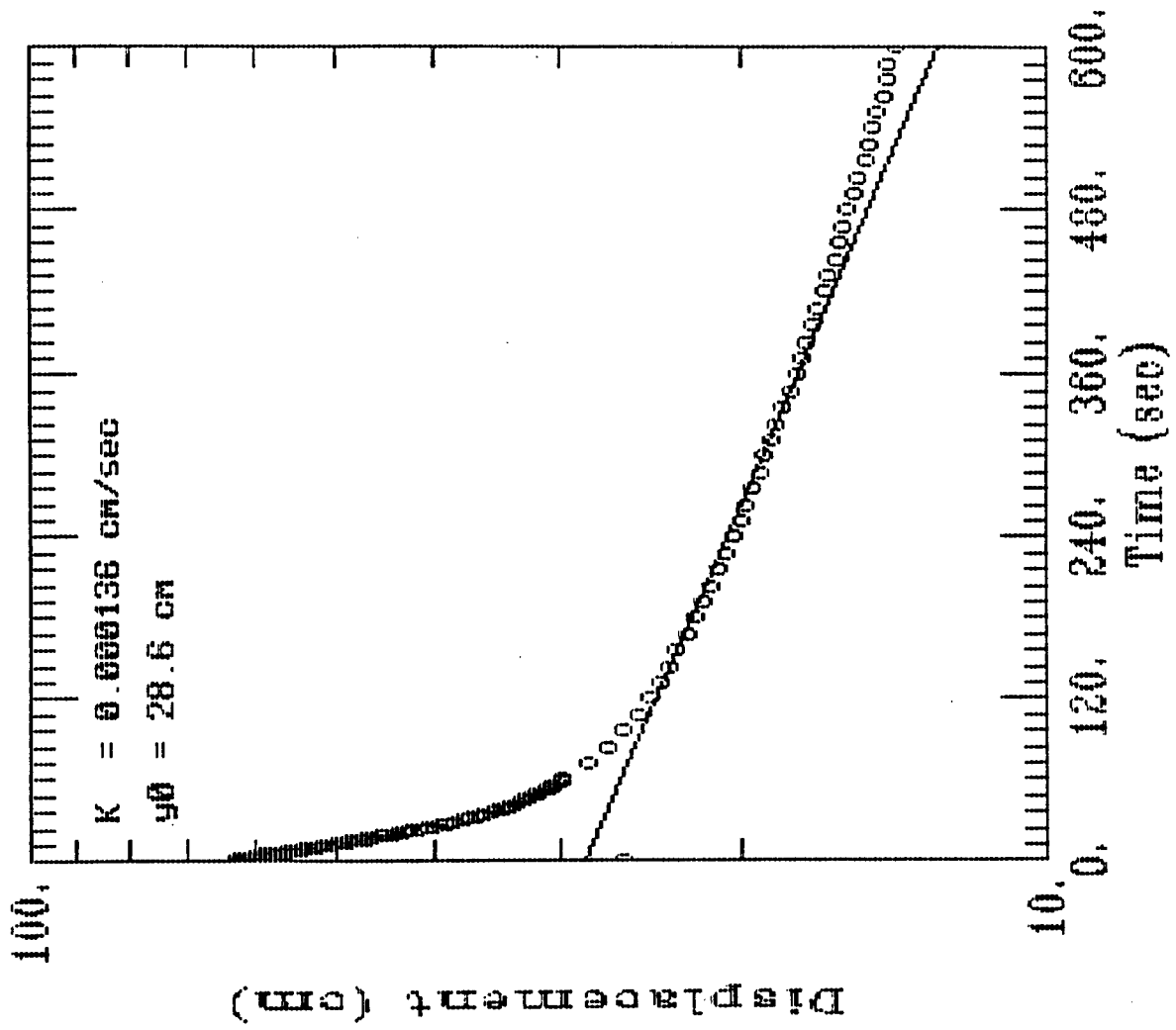
G6M-92-10X PERMEABILITY TESTS



G6M-92-10X PERMEABILITY TEST #1



G6M-92-10X PERMEABILITY TEST #2



✓ WRI
✓ GRAPH

7/23/98

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. G6M.92.10x

SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M.92.10x 4"	R. TRUSTAD
DATE OF TEST	10.07.92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE 1000 C / 1K601732	
TEST #	SEL 0 / TEST 10#2	
DATA COLLECTION RATE	LOG 1	
TRANSDUCER		
SERIAL #	2046 DE	
PSIG	10	
SCALE FACTOR	10.001	
OFFSET	-0.034	
INPUT CHANNEL	#1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	14.46 (PVC)	
WELL DEPTH (FT./TOC)	20.92 (PVC)	
XD DEPTH (FT.TOC)	20.00 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	18.00 (PVC)	
TIME OF SLUG PLACEMENT	-	
TIME OF WL EQUILIBRATION	-	
NEW XD REFERENCE	-	
START TIME OF TEST	0.00	
END TIME OF TEST	15.00	
NOTES:	SLUG 3' x 3" SOLID PVC	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

✓ WRI
✓ GRAPH

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AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. GUM-9210X

SETUP	DATE	BY WHOM
MONITORING WELL ID	4" GUM-92-10X	R. RUSTAD
DATE OF TEST	10.07.92	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE 1000C / 1001732	
TEST #	SEL 1 / 2 OF 2	
DATA COLLECTION RATE	Log 1	
TRANSDUCER		
SERIAL #	2046 DE	
PSIG	10	
SCALE FACTOR	10.001	
OFFSET	-0.034	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	14.36' (PVC)	
WELL DEPTH (FT./TOC)	20.92' (PVC)	
XD DEPTH (FT./TOC)	20.00 (PVC)	
INITIAL XD REFERENCE	6.00	
SLUG DEPTH (FT./TOC)	18.00	
TIME OF SLUG PLACEMENT		
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE		
START TIME OF TEST		
END TIME OF TEST		
NOTES:	SLUG: 3' x 3" SOLID PVC	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

WELL G6M-92-11X
WELL DIAMETER = 0.333 FT. SATURATED SCREEN LENGTH = 7.0 FT. BORING DIAMETER = 0.8333 FT

TEST 1 MINUTES	FEET	TEST 2 MINUTES	FEET
0	0	0	0
0.0033	0.088	0.0033	0.008
0.0066	1.258	0.0066	0.258
0.01	1.382	0.01	1.058
0.0133	1.293	0.0133	1.511
0.0166	0.752	0.0166	0.688
0.02	1.41	0.02	1.821
0.0233	1.777	0.0233	1.85
0.0266	1.837	0.0266	1.888
0.03	1.881	0.03	1.891
0.0333	1.885	0.0333	1.9
0.0366	1.894	0.0366	1.898
0.04	1.872	0.04	1.875
0.0433	1.888	0.0433	1.888
0.0466	1.853	0.0466	1.834
0.05	1.84	0.05	1.847
0.0533	1.828	0.0533	1.84
0.0566	1.815	0.0566	1.858
0.06	1.815	0.06	1.783
0.0633	1.793	0.0633	1.784
0.0666	1.793	0.0666	1.793
0.07	1.78	0.07	1.777
0.0733	1.774	0.0733	1.764
0.0766	1.78	0.0766	1.777
0.08	1.755	0.08	1.758
0.0833	1.745	0.0833	1.781
0.0866	1.738	0.0866	1.73
0.09	1.738	0.09	1.738
0.0933	1.73	0.0933	1.707
0.0966	1.717	0.0966	1.717
0.1	1.704	0.1	1.688
0.1033	1.698	0.1033	1.701
0.1066	1.698	0.1066	1.685
0.11	1.679	0.11	1.682
0.1133	1.688	0.1133	1.688
0.1166	1.688	0.1166	1.678
0.12	1.638	0.12	1.68
0.1233	1.647	0.1233	1.688
0.1266	1.641	0.1266	1.635
0.13	1.628	0.13	1.625
0.1333	1.622	0.1333	1.638
0.1366	1.613	0.1366	1.618
0.14	1.603	0.14	1.603
0.1433	1.6	0.1433	1.608
0.1466	1.587	0.1466	1.584
0.15	1.581	0.15	1.608
0.1533	1.571	0.1533	1.581
0.1566	1.568	0.1566	1.571
0.16	1.548	0.16	1.585
0.1633	1.552	0.1633	1.603
0.1666	1.54	0.1666	1.571
0.17	1.524	0.17	1.552
0.1733	1.524	0.1733	1.537
0.1766	1.527	0.1766	1.538
0.18	1.537	0.18	1.54
0.1833	1.505	0.1833	1.548
0.1866	1.495	0.1866	1.518
0.19	1.492	0.19	1.53
0.1933	1.486	0.1933	1.505
0.1966	1.47	0.1966	1.488
0.2	1.467	0.2	1.488
0.2033	1.467	0.2033	1.488
0.2066	1.454	0.2066	1.54
0.21	1.481	0.21	1.483
0.2133	1.442	0.2133	1.47
0.2166	1.432	0.2166	1.484
0.22	1.426	0.22	1.473
0.2233	1.429	0.2233	1.481
0.2266	1.42	0.2266	1.445
0.23	1.404	0.23	1.438
0.2333	1.387	0.2333	1.423
0.2366	1.387	0.2366	1.423
0.24	1.381	0.24	1.435
0.2433	1.382	0.2433	1.418
0.2466	1.368	0.2466	1.404
0.25	1.368	0.25	1.387
0.2533	1.359	0.2533	1.384
0.2566	1.353	0.2566	1.375
0.26	1.347	0.26	1.378
0.2633	1.341	0.2633	1.388
0.2666	1.334	0.2666	1.375
0.27	1.331	0.27	1.347
0.2733	1.318	0.2733	1.358
0.2766	1.315	0.2766	1.35
0.28	1.308	0.28	1.35
0.2833	1.312	0.2833	1.353
0.2866	1.293	0.2866	1.347
0.29	1.277	0.29	1.334
0.2933	1.277	0.2933	1.315
0.2966	1.274	0.2966	1.312
0.3	1.258	0.3	1.315
0.3033	1.281	0.3033	1.308
0.3066	1.258	0.3066	1.315
0.31	1.255	0.31	1.293
0.3133	1.248	0.3133	1.29
0.3166	1.238	0.3166	1.284
0.32	1.23	0.32	1.293
0.3233	1.223	0.3233	1.271
0.3266	1.22	0.3266	1.288
0.33	1.214	0.33	1.285
0.3333	1.208	0.3333	1.281
0.35	1.173	0.35	1.227
0.3666	1.135	0.3666	1.201
0.3833	1.118	0.3833	1.173
0.4	1.087	0.4	1.148
0.4166	1.058	0.4166	1.118
0.4333	1.034	0.4333	1.087
0.45	1.008	0.45	1.075
0.4666	0.988	0.4666	1.053
0.4833	0.955	0.4833	1.031
0.5	0.942	0.5	1.008
0.5166	0.92	0.5166	0.988
0.5333	0.901	0.5333	0.97
0.55	0.885	0.55	0.955

0.5000	0.800
0.5833	0.85
0.6	0.834
0.6166	0.822
0.6333	0.809
0.65	0.797
0.6666	0.787
0.6833	0.774
0.7	0.765
0.7166	0.755
0.7333	0.749
0.75	0.74
0.7666	0.73
0.7833	0.724
0.8	0.714
0.8166	0.708
0.8333	0.702
0.85	0.695
0.8666	0.688
0.8833	0.679
0.9	0.673
0.9166	0.667
0.9333	0.661
0.95	0.657
0.9666	0.648
0.9833	0.645
1	0.638
1.2	0.578
1.4	0.534
1.6	0.502
1.8	0.474
2	0.445
2.2	0.423
2.4	0.401
2.6	0.382
2.8	0.363
3	0.344
3.2	0.328
3.4	0.313
3.6	0.297
3.8	0.284
4	0.272
4.2	0.259
4.4	0.246
4.6	0.234
4.8	0.224
5	0.215
5.2	0.205
5.4	0.196
5.6	0.183
5.8	0.177
6	0.17
6.2	0.161
6.4	0.154
6.6	0.148
6.8	0.142
7	0.135
7.2	0.129
7.4	0.126
7.6	0.12
7.8	0.117
8	0.11
8.2	0.107
8.4	0.101
8.6	0.096
8.8	0.094
9	0.091
9.2	0.088
9.4	0.085
9.6	0.082
9.8	0.079
10	0.075

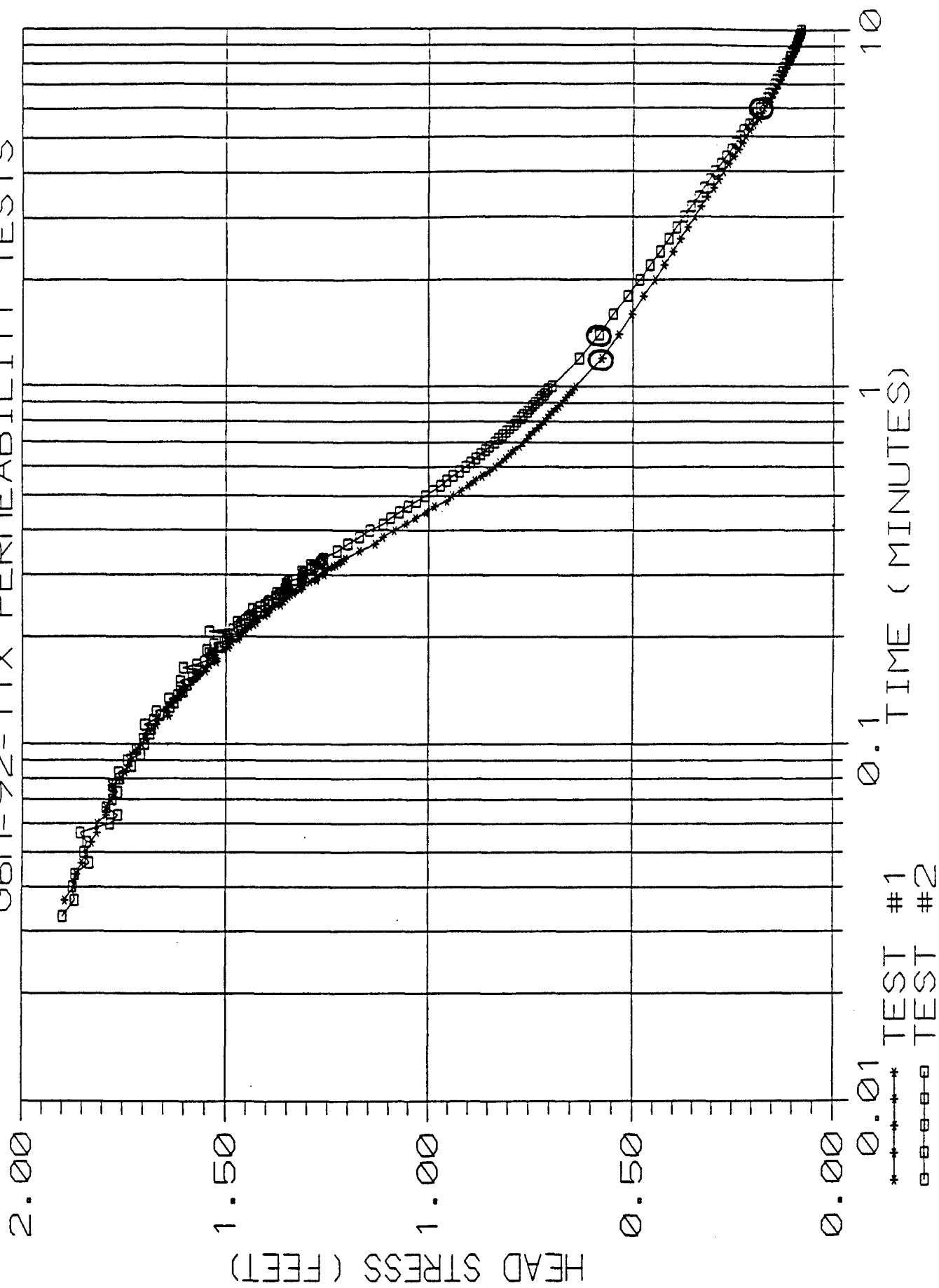
PERMEABILITY TEST RESULTS FOR G6M-92-11X

HVORSLEV:
K= 0.00014 CM/SEC
BOUWER & RICE:
K= 0.0004 CM/SEC

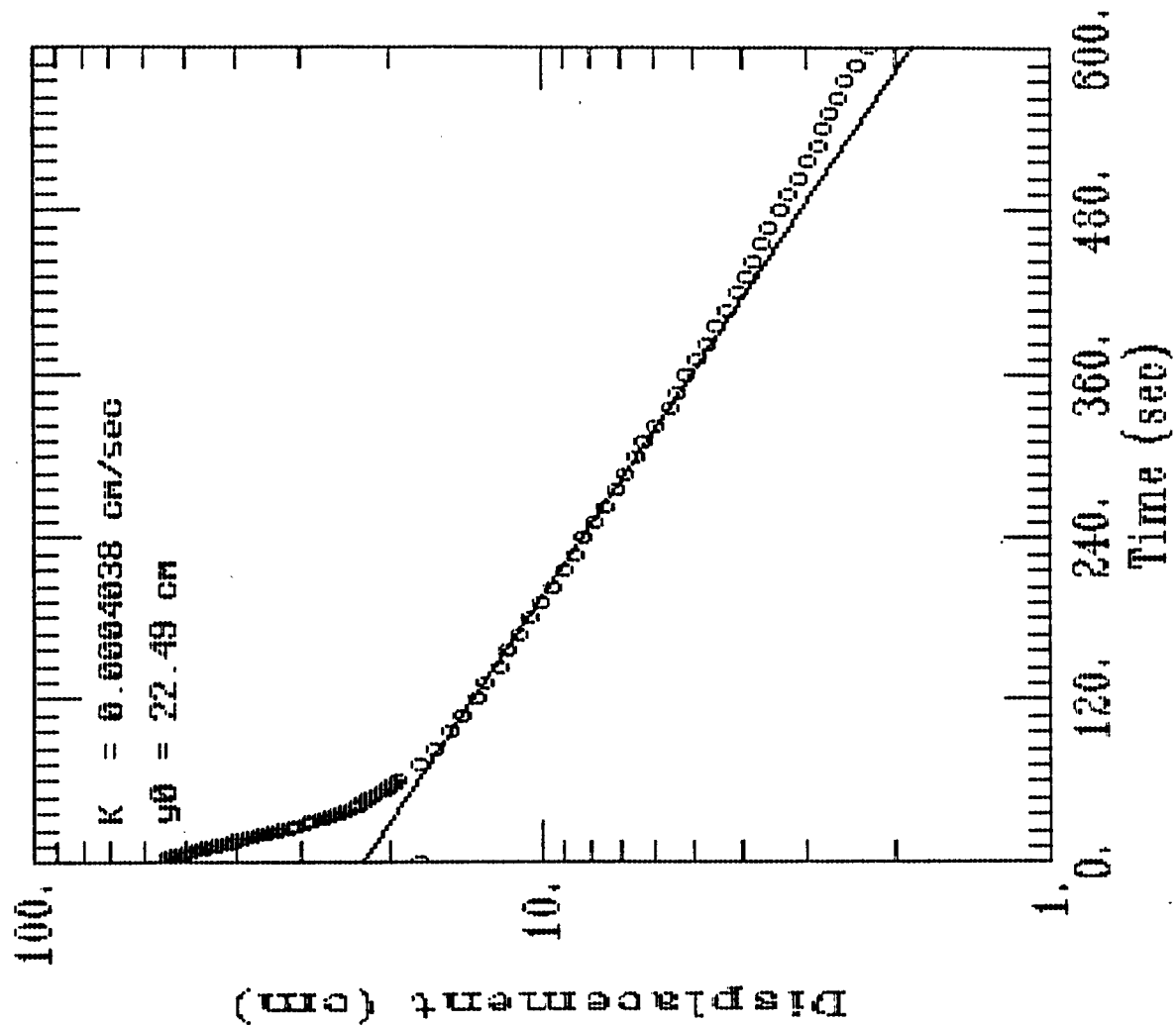
0.5000	0.939
0.5833	0.923
0.6	0.907
0.6166	0.895
0.6333	0.882
0.65	0.869
0.6666	0.857
0.6833	0.847
0.7	0.834
0.7166	0.825
0.7333	0.815
0.75	0.806
0.7666	0.797
0.7833	0.787
0.8	0.781
0.8166	0.771
0.8333	0.765
0.85	0.755
0.8666	0.749
0.8833	0.743
0.9	0.736
0.9166	0.727
0.9333	0.721
0.95	0.714
0.9666	0.711
0.9833	0.705
1	0.695
1.2	0.629
1.4	0.581
1.6	0.547
1.8	0.512
2	0.483
2.2	0.458
2.4	0.433
2.6	0.411
2.8	0.392
3	0.373
3.2	0.354
3.4	0.335
3.6	0.322
3.8	0.306
4	0.294
4.2	0.278
4.4	0.265
4.6	0.252
4.8	0.24
5	0.23
5.2	0.221
5.4	0.208
5.6	0.199
5.8	0.189
6	0.18
6.2	0.173
6.4	0.164
6.6	0.158
6.8	0.151
7	0.145
7.2	0.138
7.4	0.132
7.6	0.126
7.8	0.123
8	0.117
8.2	0.11
8.4	0.107
8.6	0.104
8.8	0.098
9	0.094
9.2	0.091
9.4	0.088
9.6	0.085
9.8	0.082
10	0.079

HVORSLEV:
K= 0.00014 CM/SEC
BOUWER & RICE:
K= 0.0004 CM/SEC

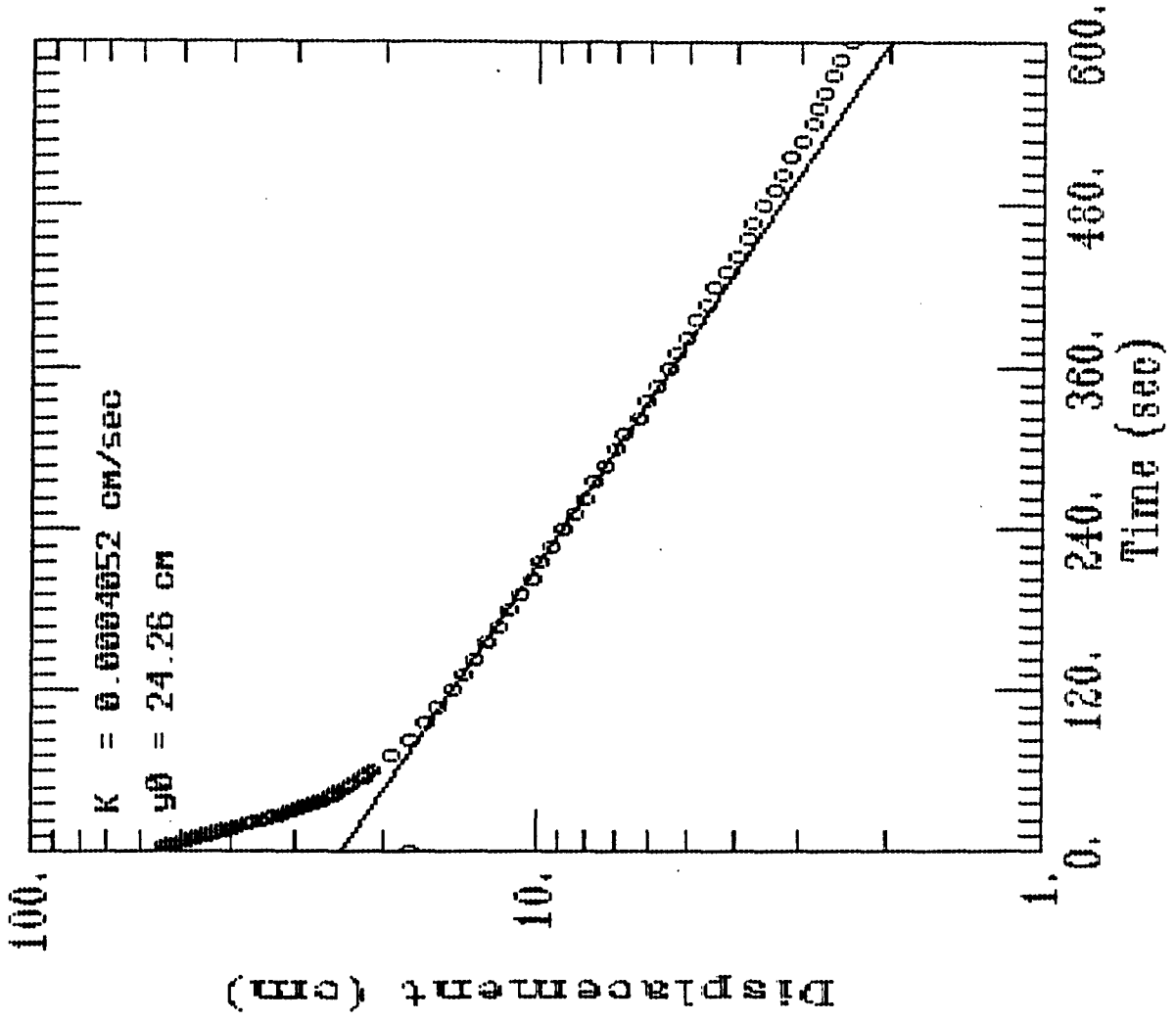
G6M-92-11X PERMEABILITY TESTS



G6M-92-11X PERMEABILITY TEST #1



G6M-92-11X PERMEABILITY TEST #2



✓ WR1
✓ GRAPU

09 045 1024

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. GGM-92-11X

SETUP	DATE	BY WHOM
MONITORING WELL ID	<u>GGM-92-11X</u> <u>4"</u>	<u>R. RUSTAD / D. PERCE</u>
DATE OF TEST	<u>10.06.92</u>	
TYPE OF TEST	<u>RIISING HEAD</u>	
HERMIT TYPE/SERIAL#	<u>SE 1000C / IRC01732</u>	
TEST #	<u>SEL 18 / 10F 2</u>	
DATA COLLECTION RATE	<u>LOG 1</u>	
TRANSDUCER		
SERIAL #	<u>2046DE</u>	
PSIG	<u>10</u>	
SCALE FACTOR	<u>10.001</u>	
OFFSET	<u>- 0.024</u>	
INPUT CHANNEL	<u># 1</u>	
TEST DATA		
INPUT MODE (TOC/SUR)	<u>TOC</u>	
STATIC WATER LEVEL (FT./TOC)	<u>14.02 (PVC)</u>	
WELL DEPTH (FT./TOC)	<u>21.01 (PVC)</u>	
XD DEPTH (FT.TOC)	<u>20.00 (PVC)</u>	
INITIAL XD REFERENCE	<u>0.00</u>	
SLUG DEPTH (FT./TOC)	<u>17.00 (PVC)</u>	
TIME OF SLUG PLACEMENT	<u>1634</u>	
TIME OF WL EQUILIBRATION	<u>—</u>	
NEW XD REFERENCE	<u>—</u>	
START TIME OF TEST	<u>1634</u>	
END TIME OF TEST	<u>—</u>	
NOTES:	<u>SLUG: 3'x3" SOLID CORE PVC ROD</u>	

10' SCREEN

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

⑨

✓ WK1
✓ GRAPU

01051002

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 66M-92-11X

SETUP	DATE	BY WHOM
MONITORING WELL ID	4" / 66M-92-11X	R. RUSTAD D. PIERCE
DATE OF TEST	10-06-92	
TYPE OF TEST	RISING HEAD	
HERMIT TYPE/SERIAL#	SE 1000C / 1K601732	
TEST #	SEL 19 / 2 OF 2	
DATA COLLECTION RATE	Log 1	
TRANSDUCER		
SERIAL #	2046 DE	
PSIG	10	
SCALE FACTOR	10.001	
OFFSET	-0.034	
INPUT CHANNEL	# 1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	14.00 (PVC)	
WELL DEPTH (FT./TOC)	21.01 (PVC)	
XD DEPTH (FT./TOC)	20.00 (PVC)	
INITIAL XD REFERENCE	0.00	
SLUG DEPTH (FT./TOC)	12.00 (PVC)	
TIME OF SLUG PLACEMENT	17.02	
TIME OF WL EQUILIBRATION	—	
NEW XD REFERENCE	—	
START TIME OF TEST	1702	
END TIME OF TEST	—	
NOTES:	SLUG: 3' x 3" SOLIDSCORE PVC ROD	

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

PROJECT

COMP BY

JOB NO

CHK BY

DATE

$$-K = \left[\frac{\log H(t_1) - \log H(t_2)}{t_1 - t_2} \right] \frac{r^2 \log (L/R)}{2L}$$

GGM-92-01X TEST #1

$$H(t_1) = 1.021 \text{ Ft} \quad t_1 = 0.1866 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$H(t_2) = 0.512 \text{ Ft} \quad t_2 = 0.3666 \text{ min}$$

$$R = 0.417 \text{ Ft}$$

$$L = 6.5 \text{ Ft}$$

$$-K = \left[\frac{\log (1.021) - \log (0.512)}{0.1866 - 0.3666} \right] \frac{(0.167)^2 \log (6.5/0.417)}{2(6.5)}$$

$$-K = [1.671] (0.00256) = -4.28 \times 10^{-3} \text{ Ft/min}$$

$$K = 2.2 \times 10^{-3} \text{ cm/sec}$$

TEST #2

$$H(t_1) = 1.002 \text{ Ft} \quad t_1 = 0.15 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$H(t_2) = 0.502 \text{ Ft} \quad t_2 = 0.3666 \text{ min}$$

$$R = 0.417 \text{ Ft}$$

$$L = 6.5 \text{ Ft}$$

$$-K = \left[\frac{\log (1.002) - \log (0.502)}{0.1866 - 0.3666} \right] \frac{(0.167)^2 \log (6.5/0.417)}{2(6.5)}$$

$$-K = [1.668] (0.00256) = -0.00427 \text{ Ft/min}$$

$$K = 2.2 \times 10^{-3} \text{ cm/sec}$$

GGM-92-02X TEST #1

$$H(t_1) = 1.211 \text{ Ft} \quad (t_1) = 0.15 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$H(t_2) = 0.736 \text{ Ft} \quad (t_2) = 0.3 \text{ min}$$

$$R = 0.417 \text{ Ft}$$

$$L = 7.4 \text{ Ft}$$

$$-K = \left[\frac{\log (1.211) - \log (0.736)}{0.15 - 0.3} \right] \frac{(0.167)^2 \log (7.4/0.417)}{2(7.4)}$$

$$-K = [-1.442] [0.00235] = -3.39 \text{ Ft/min}$$

$$K = 1.7 \times 10^{-3} \text{ cm/sec}$$

PROJECT	COMP BY	JOB NO
	CHK BY	DATE

GLM-92-02X TEST 2

$$H(t_1) = 1.008 \text{ Ft} \quad (t_1) = 0.14 \text{ min}$$

$$H(t_2) = 0.389 \text{ Ft} \quad (t_2) = 0.35 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$R = 0.417 \text{ Ft}$$

$$L = 7.4 \text{ Ft}$$

$$-K = \left[\frac{\log(1.008) - \log(0.389)}{0.14 - 0.35} \right] \frac{(0.167)^2 \log(7.4/0.417)}{2(7.4)}$$

$$-K = (-0.197) (0.00235) = -4.93 \times 10^{-3} \text{ Ft/min}$$

$$K = 2.5 \times 10^{-3} \text{ Ft/min} \quad \text{cm/sec}$$

GLM-92-03X TEST # 1

$$H(t_1) = 1.005 \text{ Ft} \quad (t_1) = 0.19 \text{ min}$$

$$H(t_2) = 0.474 \text{ Ft} \quad (t_2) = 0.4666 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$R = 0.417 \text{ Ft}$$

$$L = 8.7 \text{ Ft}$$

$$-K = \left[\frac{\log(1.005) - \log(0.474)}{0.19 - 0.4666} \right] \frac{(0.167)^2 \log(8.7/0.417)}{2(8.7)}$$

$$-K = [-1.180] [0.00211] = -2.50 \times 10^{-3} \text{ Ft/min}$$

$$K = 1.3 \times 10^{-3} \text{ cm/sec}$$

TEST # 2

$$H(t_1) = 0.904 \text{ Ft} \quad t_1 = 0.1833$$

$$H(t_2) = 0.363 \text{ Ft} \quad t_2 = 0.45$$

$$-K = \left[\frac{\log(0.904) - \log(0.363)}{0.1833 - 0.45} \right] \frac{(0.167)^2 \log(8.7/0.417)}{2(8.7)}$$

$$-K = [-1.486] [0.00211] = -3.14 \times 10^{-3} \text{ Ft/min}$$

$$K = 1.6 \times 10^{-3} \text{ cm/sec}$$

GLM-92-04X TEST # 1

$$H(t_1) = 1.116 \text{ Ft} \quad t_1 = 0.0433 \text{ min}$$

$$H(t_2) = 0.449 \text{ Ft} \quad t_2 = 0.0866 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$R = 0.417 \text{ Ft}$$

$$L = 5.9 \text{ Ft}$$

$$-K = \left[\frac{\log(1.116) - \log(0.449)}{0.0433 - 0.0866} \right] \frac{(0.167)^2 \log(5.9/0.417)}{2(5.9)}$$

$$-K = [-9.132] [0.00272] = -2.48 \times 10^{-2} \text{ Ft/min}$$

$$= 1.3 \times 10^{-2} \text{ cm/sec}$$

PROJECT	COMP BY	JOB NO
	CHK BY	DATE

66M-92.04X TEST #2

$H(t_1) = 0.907 \text{ Fe}$ $t_1 = 0.05 \text{ min}$ $r = 0.167 \text{ Fe}$
 $H(t_2) = 0.537 \text{ Fe}$ $t_2 = 0.0733 \text{ min}$ $R = 0.417 \text{ Fe}$
 $L = 5.9 \text{ Fe}$

$$-K = \left[\frac{\log(0.907) - \log(0.537)}{0.05 - 0.0733} \right] \frac{(0.167)^2 \log(5.9/0.417)}{2(5.9)}$$

$$-K = [-9.77] [0.00272] = -2.66 \times 10^{-2} \text{ Fe/min}$$

$$K = 1.3 \times 10^{-2} \text{ cm/sec}$$

66M-92.05X TEST #1

$H(t_1) = 1.233 \text{ Fe}$ $t_1 = 0.0366 \text{ min}$ $r = 0.167 \text{ Fe}$
 $H(t_2) = 0.439 \text{ Fe}$ $t_2 = 0.0933 \text{ min}$ $R = 0.417 \text{ Fe}$
 $L = 6.2 \text{ Fe}$

$$-K = \left[\frac{\log(1.233) - \log(0.439)}{0.0366 - 0.0933} \right] \frac{(0.167)^2 \log(6.2/0.417)}{2(6.2)}$$

$$-K = [-7.91] [0.00264] = -2.09 \times 10^{-2} \text{ Fe/min}$$

$$K = 1.1 \times 10^{-2} \text{ cm/sec}$$

TEST #2

$H(t_1) = 1.227 \text{ Fe}$ $t_1 = 0.0366 \text{ min}$
 $H(t_2) = 0.442 \text{ Fe}$ $t_2 = 0.0933 \text{ min}$

$$-K = \left[\frac{\log(1.227) - \log(0.442)}{0.0366 - 0.0933} \right] \frac{(0.167)^2 \log(6.2/0.417)}{2(6.2)}$$

$$-K = [-7.82] [0.00264] = -2.06 \times 10^{-2} \text{ Fe/min}$$

$$K = 1.0 \times 10^{-2} \text{ cm/sec}$$

66M-92.06X TEST #1

$H(t_1) = 1.214 \text{ Fe}$ $t_1 = 0.0333 \text{ min}$ $r = 0.167 \text{ Fe}$
 $H(t_2) = 0.477 \text{ Fe}$ $t_2 = 0.0766 \text{ min}$ $R = 0.417 \text{ Fe}$
 $L = 6.7 \text{ Fe}$

$$-K = \left[\frac{\log(1.214) - \log(0.477)}{0.0333 - 0.0766} \right] \frac{(0.167)^2 \log(6.7/0.417)}{2(6.7)}$$

$$-K = [-9.37] [0.00251] = -2.35 \times 10^{-2} \text{ Fe/min}$$

$$K = 1.2 \times 10^{-2} \text{ cm/sec}$$

TEST #2

$H(t_1) = 1.163 \text{ Fe}$ $t_1 = 0.0333 \text{ min}$ $(t_1) \text{ (Rel.)}$
 $H(t_2) = 0.426 \text{ Fe}$ $t_2 = 0.08 \text{ min}$

$$-K = \left[\frac{\log(1.163) - \log(0.426)}{0.0333 - 0.08} \right] \frac{(0.167)^2 \log(6.7/0.417)}{2(6.7)}$$

$$-K = [-9.74] [0.00251] = -2.34 \times 10^{-2} \text{ Fe/min}$$

$$K = 1.2 \times 10^{-2} \text{ cm/sec}$$

PROJECT	COMP BY	JOB NO.
	CHK BY	DATE

GUM-92-07X TEST #1

$$\begin{aligned}
 H(t_1) &= 1.227 \text{ Ft} \quad (t_1) = 0.0366 \text{ min} & r &= 0.167 \text{ Ft} \\
 H(t_2) &= 0.585 \text{ Ft} \quad (t_2) = 0.07 \text{ min} & R &= 0.417 \text{ Ft} \\
 & & L &= 7.4 \text{ Ft}
 \end{aligned}$$

$$-K = \left[\frac{\log(1.227) - \log(0.585)}{0.0366 - 0.07} \right] \frac{(0.167)^2 \log(7.4/0.417)}{2(7.4)}$$

$$-K = [-9.63] [0.00235] = -2.27 \times 10^{-2} \text{ Ft/min}$$

$$K = 1.2 \times 10^{-2} \text{ cm/sec}$$

TEST #2

$$\begin{aligned}
 H(t_1) &= 1.103 \text{ Ft} \quad (t_1) = 0.0433 \text{ min} \\
 H(t_2) &= 0.496 \text{ Ft} \quad (t_2) = 0.08 \text{ min}
 \end{aligned}$$

$$-K = \left[\frac{\log(1.103) - \log(0.496)}{0.0433 - 0.08} \right] \frac{(0.167)^2 \log(7.4/0.417)}{2(7.4)}$$

$$-K = [-9.46] [0.00235] = -2.22 \times 10^{-2} \text{ Ft/min}$$

$$K = 1.1 \times 10^{-2} \text{ cm/sec}$$

GUM-92-08X TEST #1

$$\begin{aligned}
 H(t_1) &= 1.211 \text{ Ft} \quad (t_1) = 0.2 \text{ min} & r &= 0.167 \text{ Ft} \\
 H(t_2) &= 0.79 \text{ Ft} \quad (t_2) = 0.35 \text{ min} & R &= 0.417 \text{ Ft} \\
 & & L &= 8.0 \text{ Ft}
 \end{aligned}$$

$$-K = \left[\frac{\log(1.211) - \log(0.79)}{0.2 - 0.35} \right] \frac{(0.167)^2 \log(8.0/0.417)}{2(8.0)}$$

$$-K = [-1.24] [0.00224] = -2.77 \times 10^{-3} \text{ Ft/min}$$

$$K = \frac{(2.2)}{2.0} 1.4 \times 10^{-3} \text{ cm/sec}$$

TEST #2

$$\begin{aligned}
 H(t_1) &= 1.176 \text{ Ft} \quad (t_1) = 0.2 \text{ min} \\
 H(t_2) &= 0.733 \text{ Ft} \quad (t_2) = 0.3666 \text{ min}
 \end{aligned}$$

$$-K = \left[\frac{\log(1.176) - \log(0.733)}{0.2 - 0.3666} \right] \frac{(0.167)^2 \log(8.0/0.417)}{2(8.0)}$$

$$-K = [-1.23] [0.00224] = -2.76 \times 10^{-3} \text{ Ft/min}$$

$$K = 1.4 \times 10^{-3} \text{ cm/sec}$$

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GLM-92-09X TEST # 1

$$H(t_1) = 1.151 \text{ Ft} \quad (t_1) = 0.2066 \text{ min}$$

$$H(t_2) = 0.461 \text{ Ft} \quad (t_2) = 0.5333 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$R = 0.417 \text{ Ft}$$

$$L = 8.4 \text{ Ft}$$

$$-K = \left\{ \frac{\log(1.151) - \log(0.461)}{0.2066 - 0.5333} \right\} \frac{(0.167)^2 \log(8.4/0.417)}{2(8.4)}$$

$$-K = [-1.22] [0.00216] = -2.64 \times 10^{-3} \text{ Ft/min}$$

$$K = 1.3 \times 10^{-3} \text{ cm/sec}$$

TEST # 2

$$H(t_1) = 1.163 \text{ Ft} \quad (t_1) = 0.2066 \text{ min}$$

$$H(t_2) = 0.449 \text{ Ft} \quad (t_2) = 0.55 \text{ min}$$

$$-K = \left\{ \frac{\log(1.163 \text{ Ft}) - \log(0.449)}{0.2066 - 0.55} \right\} \frac{(0.167)^2 \log(8.4/0.417)}{2(8.4)}$$

$$-K = [-1.204] [0.00216] = -2.6 \times 10^{-3} \text{ Ft/min}$$

$$K = 1.3 \times 10^{-3} \text{ cm/sec}$$

GLM-92-10X TEST #1

$$H(t_1) = 0.828 \quad (t_1) = 1.6 \text{ min}$$

$$H(t_2) = 0.537 \quad (t_2) = 7 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$R = 0.417 \text{ Ft}$$

$$L = 6.5 \text{ Ft}$$

$$-K = \left\{ \frac{\log(0.828) - \log(0.537)}{1.6 - 7} \right\} \frac{(0.167)^2 \log(6.5/0.417)}{2(6.5)}$$

$$-K = [-0.0348] [0.00256] = -8.9 \times 10^{-5} \text{ Ft/min}$$

$$K = 4.5 \times 10^{-5} \text{ cm/sec}$$

TEST # 2

$$H(t_1) = 0.86 \text{ Ft} \quad (t_1) = 1.6 \text{ min}$$

$$H(t_2) = 0.544 \text{ Ft} \quad (t_2) = 7 \text{ min}$$

$$-K = \left\{ \frac{\log(0.86) - \log(0.544)}{1.6 - 7} \right\} \frac{(0.167)^2 \log(6.5/0.417)}{2(6.5)}$$

$$-K = [-0.0368] [0.00256] = -9.4 \times 10^{-5} \text{ Ft/min}$$

$$K = 4.8 \times 10^{-5} \text{ cm/sec}$$

PROJECT	COMP BY	JOB NO.
	CHK BY	DATE

GLM-72-11X TEST # 1

$$H(t_1) = 0.575 \text{ Ft} \quad (t_1) = 1.2 \text{ min}$$

$$r = 0.167 \text{ Ft}$$

$$H(t_2) = 0.17 \text{ Ft} \quad (t_2) = 6 \text{ min}$$

$$R = 0.417 \text{ Ft}$$

$$L = 7.0 \text{ Ft}$$

$$-K = \left[\frac{\log(0.575) - \log(0.17)}{1.2 - 6} \right] \frac{(0.167)^2 \log\left(\frac{7.0}{0.417}\right)}{2(7.0)}$$

$$-K = \{-0.110\} [0.00244] = -2.68 \times 10^{-4} \text{ Ft/min}$$

$$K = \text{Rel} \quad 1.4 \times 10^{-4} \text{ Ft/min cm/sec} \quad \text{Rel}$$

TEST # 2

$$H(t_1) = 0.581 \text{ Ft} \quad (t_1) = 1.4 \text{ min}$$

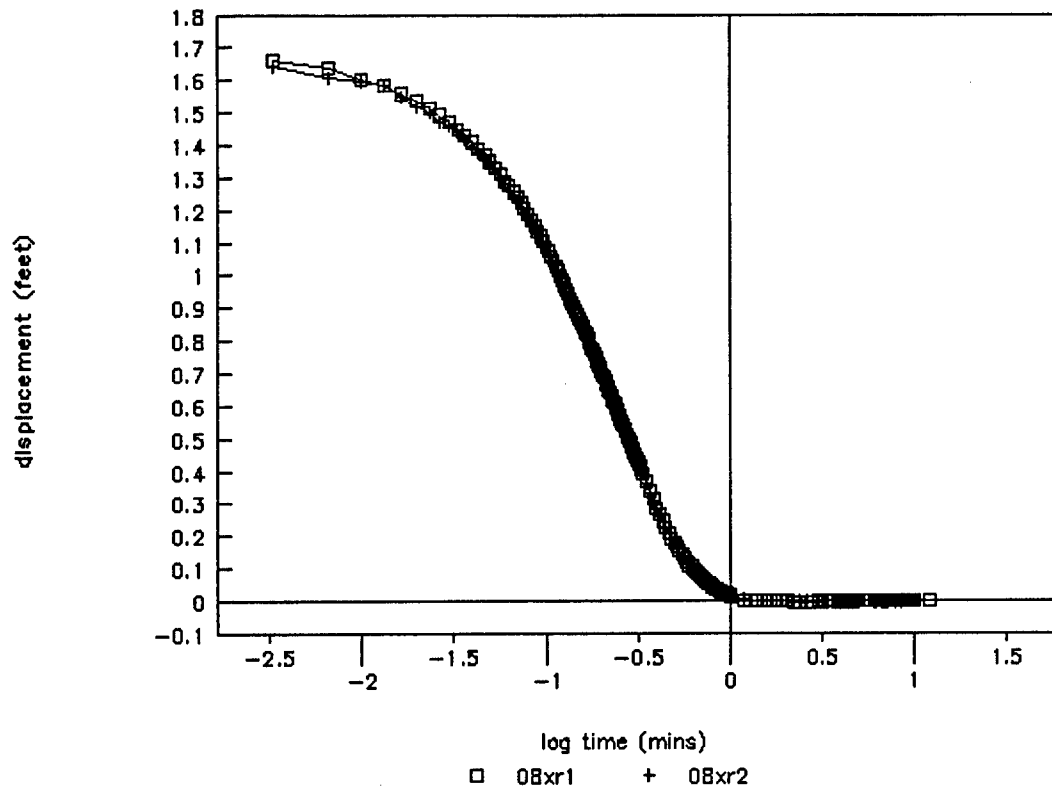
$$H(t_2) = 0.18 \text{ Ft} \quad (t_2) = 6 \text{ min}$$

$$-K = \left[\frac{\log(0.581) - \log(0.18)}{1.4 - 6} \right] \frac{(0.167)^2 \log\left(\frac{7.0}{0.417}\right)}{2(7.0)}$$

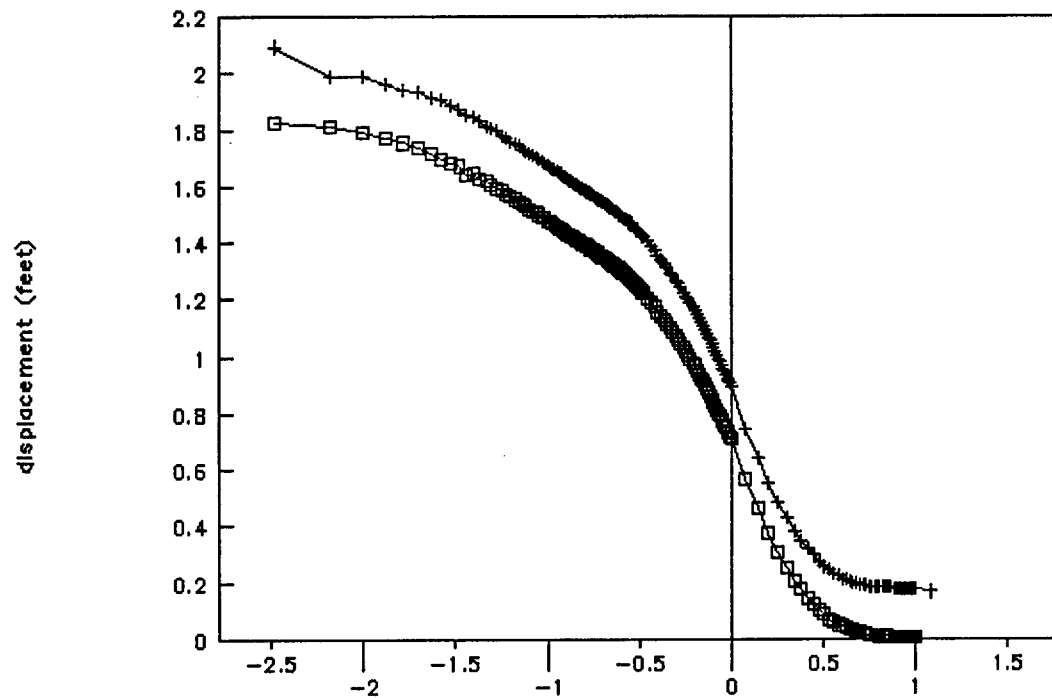
$$-K = \{-0.111\} [0.00244] = -2.7 \times 10^{-4} \text{ Ft/min}$$

$$K = 1.4 \times 10^{-4} \text{ Ft/min cm/sec} \quad \text{Rel}$$

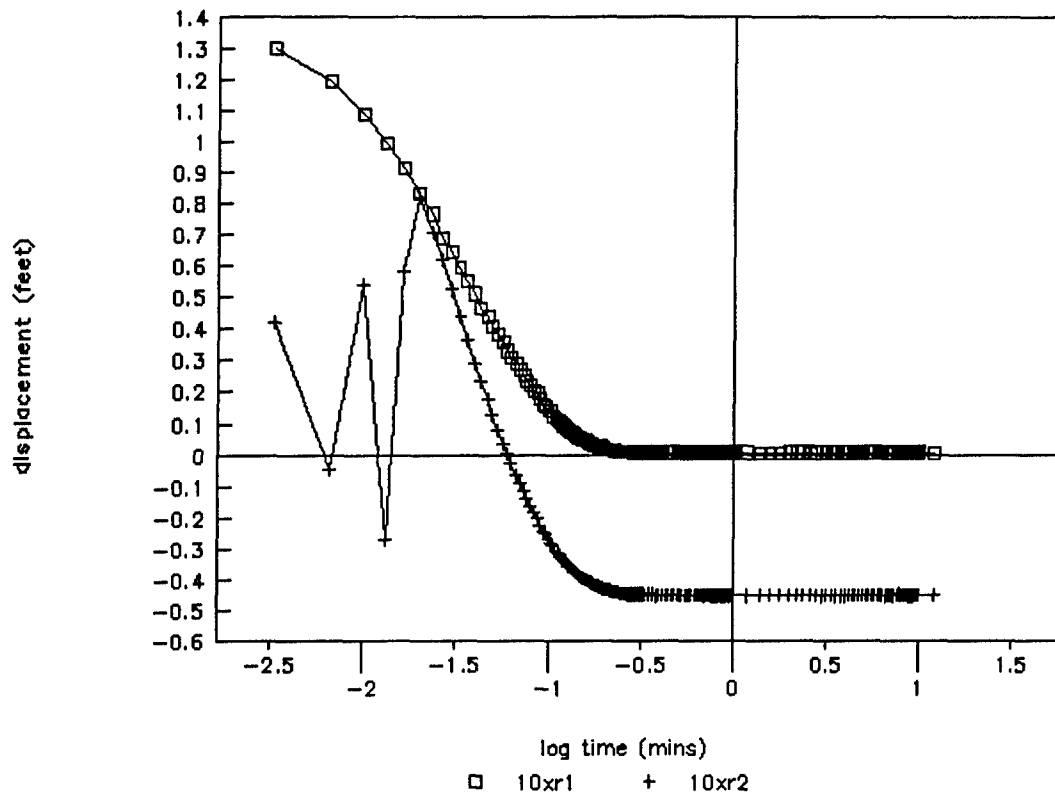
rising head tests at G3M-93-08X



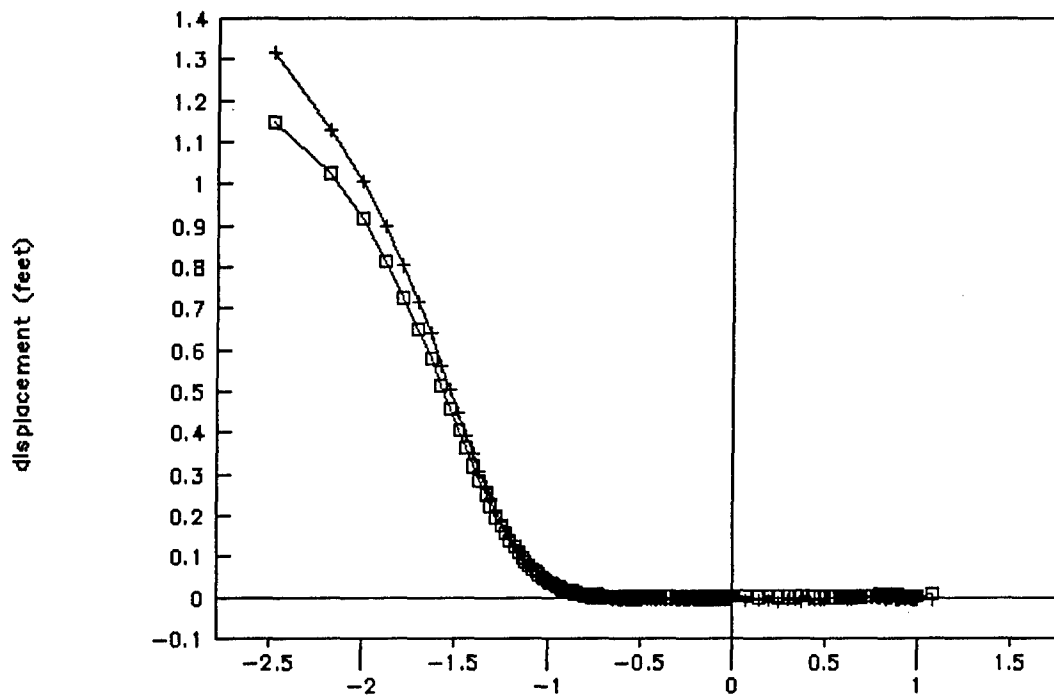
rising head tests at G3M-93-09X



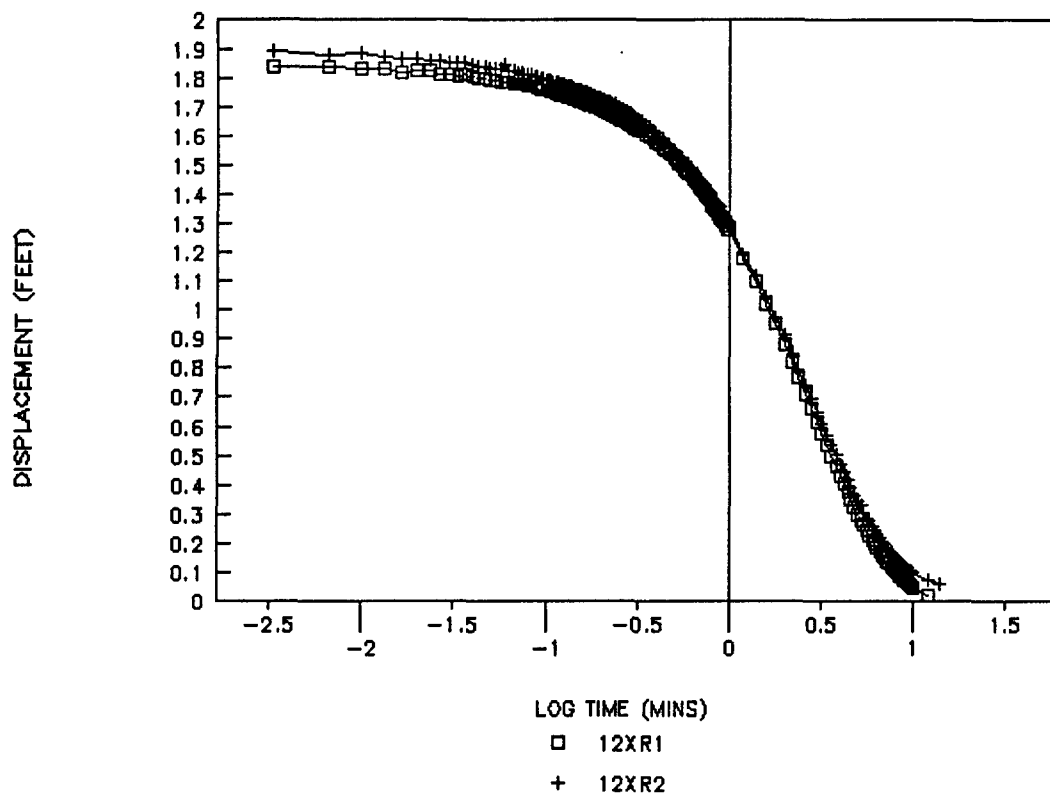
rising head tests at G3M-93-10X



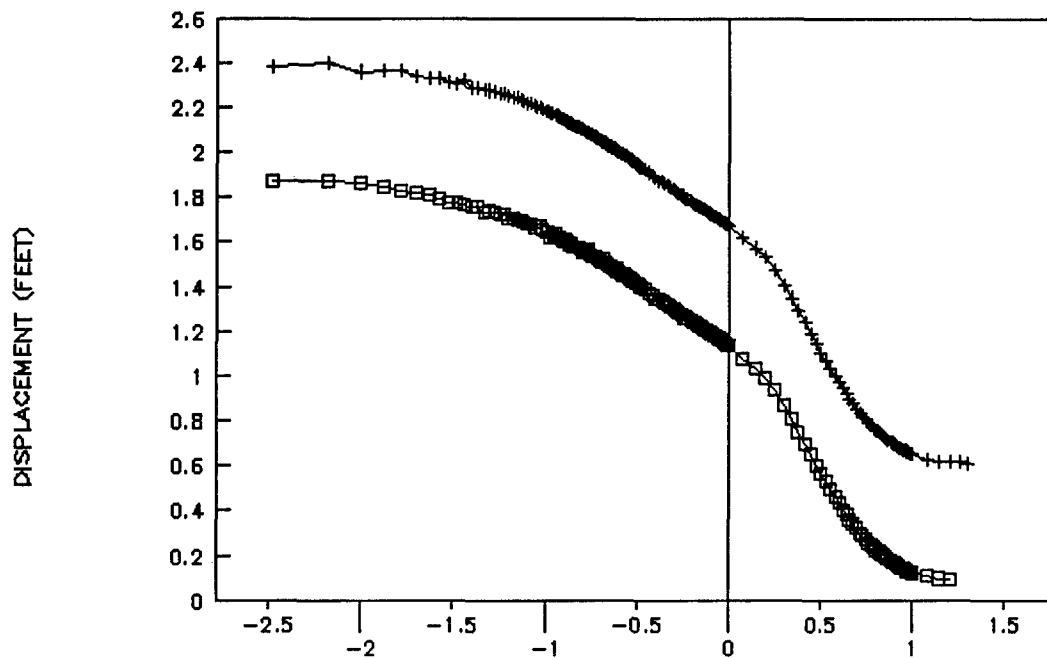
rising head tests at G3M-93-11X



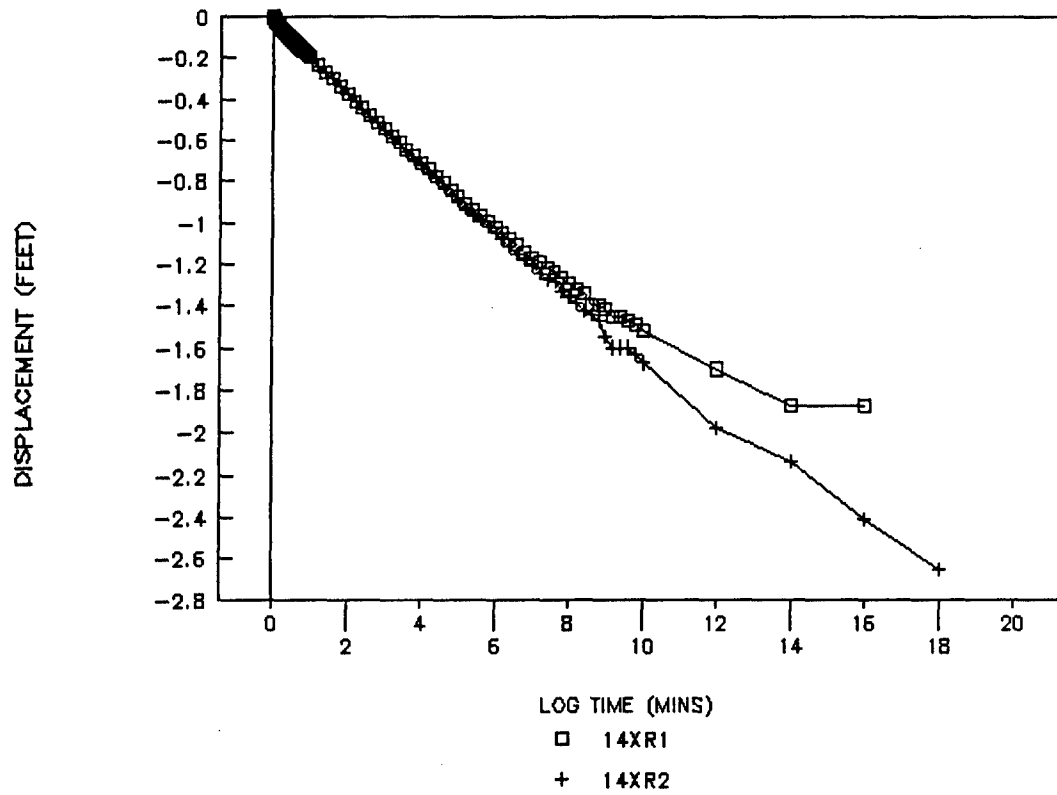
RISING HEAD TESTS AT G6M-93-12X



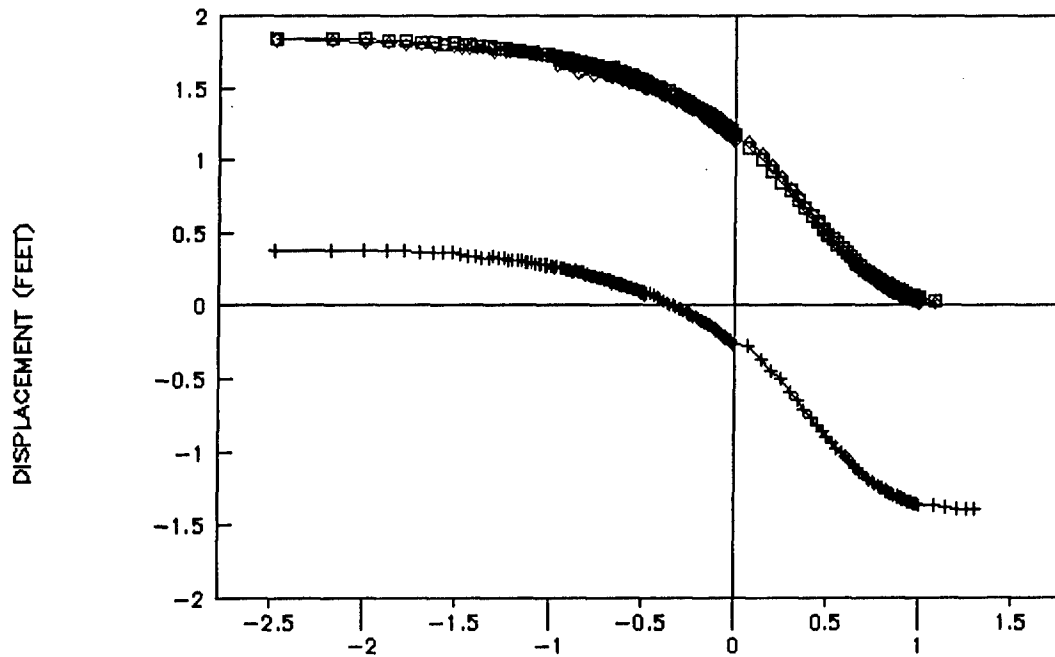
RISING HEAD TESTS AT G6M-93-13X



RIISING HEAD TESTS AT G6M-93-14X

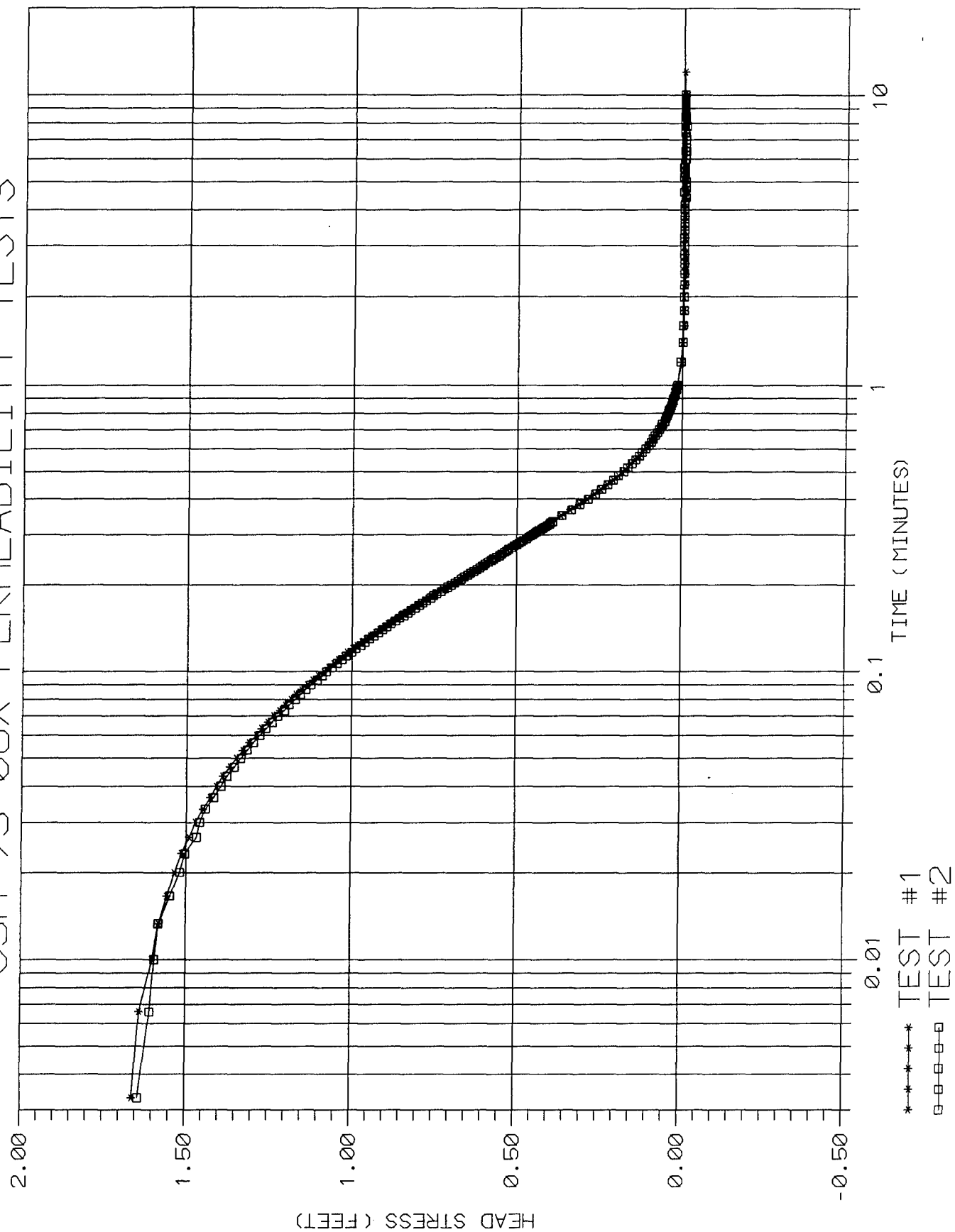


RIISING HEAD TESTS AT G6M-93-14X



WELL	TEST NO.	HYDRAULIC CONDUCTIVITY (FT/DAY)	
		HVORSLEV	BOUWER & RICE
G3M-93-08X	1	$3.43 \cdot 10^1$	$2.57 \cdot 10^1$
	2	$3.42 \cdot 10^1$	$2.52 \cdot 10^1$
G3M-93-09X	1	$9.01 \cdot 10^0$	$6.51 \cdot 10^0$
	2	$7.17 \cdot 10^0$	$5.18 \cdot 10^0$
G3M-93-10X	1	$1.58 \cdot 10^2$	$1.19 \cdot 10^2$
	2	2.08 8.34 $\cdot 10^2$	1.58 6.31 $\cdot 10^2$
G3M-93-11X	1	$2.43 \cdot 10^2$	$1.84 \cdot 10^2$
	2	$3.11 \cdot 10^2$	$2.36 \cdot 10^2$
⁶ / ₇ G3M-93-12X	1	$2.84 \cdot 10^0$	$1.98 \cdot 10^0$
	2	$2.69 \cdot 10^0$	$1.81 \cdot 10^0$
⁶ / ₇ G3M-93-13X	1	$2.64 \cdot 10^0$	$1.92 \cdot 10^0$
	2	$1.55 \cdot 10^0$	$1.09 \cdot 10^0$
⁶ / ₇ G3M-93-14X	1	$2.82 \cdot 10^0$	$2.04 \cdot 10^0$
	3	$3.20 \cdot 10^0$	$2.24 \cdot 10^0$

G3M-93-08X PERMEABILITY TESTS



Fort Devens - Groups 3&6
G3M-93-08X TEST 1
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 3.32E+01 ft/day
1.17E-02 cm/sec

Basic Time Lag: 0.22 m

2.3 Times Basic Time Lag: 0.51 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 3.48E+01 ft/day
1.23E-02 cm/sec

Time Coordinate T1: 0.2 m

Time Coordinate T2: 1.3 m

Head Ratio Coordinate H1: 50.12E-02

Head Ratio Coordinate H2: 19.95E-04

Well/Aquifer Parameters

Length of well screen: 8.47 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

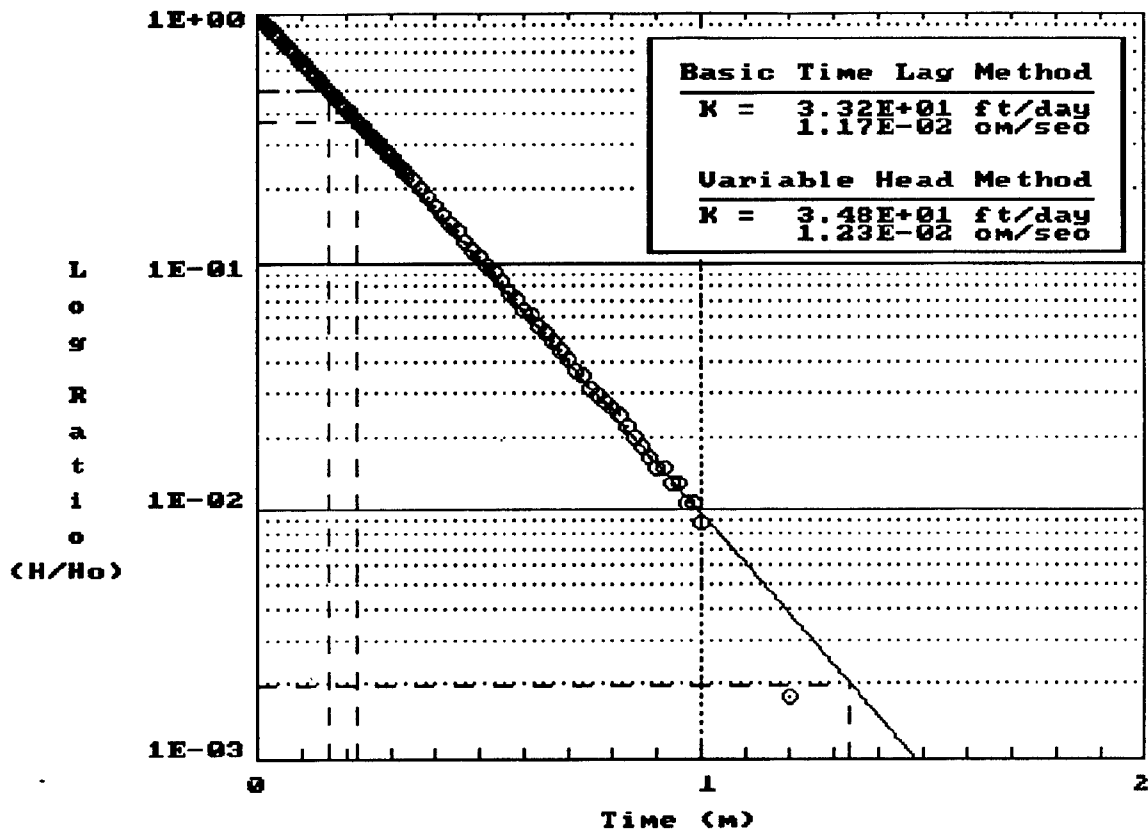
Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0000	1.000	2	0.0033	0.981	3	0.0066	0.968
4	0.0100	0.946	5	0.0133	0.934	6	0.0166	0.920
7	0.0200	0.907	8	0.0233	0.894	9	0.0266	0.881
10	0.0300	0.869	11	0.0333	0.856	12	0.0366	0.843
13	0.0400	0.832	14	0.0433	0.821	15	0.0466	0.808

16	0.0500	0.797	17	0.0533	0.786	18	0.0566	0.774
19	0.0600	0.761	20	0.0633	0.752	21	0.0666	0.741
22	0.0700	0.731	23	0.0733	0.720	24	0.0766	0.711
25	0.0800	0.699	26	0.0833	0.690	27	0.0866	0.681
28	0.0900	0.670	29	0.0933	0.660	30	0.0966	0.651
31	0.1000	0.641	32	0.1033	0.633	33	0.1066	0.623
34	0.1100	0.615	35	0.1133	0.606	36	0.1166	0.599
37	0.1200	0.589	38	0.1233	0.582	39	0.1266	0.573
40	0.1300	0.565	41	0.1333	0.558	42	0.1366	0.548
43	0.1400	0.541	44	0.1433	0.533	45	0.1466	0.526
46	0.1500	0.519	47	0.1533	0.511	48	0.1566	0.504
49	0.1600	0.496	50	0.1633	0.488	51	0.1666	0.483
52	0.1700	0.475	53	0.1733	0.468	54	0.1766	0.461
55	0.1800	0.455	56	0.1833	0.449	57	0.1866	0.442
58	0.1900	0.435	59	0.1933	0.429	60	0.1966	0.424
61	0.2000	0.418	62	0.2033	0.411	63	0.2066	0.405
64	0.2100	0.399	65	0.2133	0.393	66	0.2166	0.388
67	0.2200	0.382	68	0.2233	0.377	69	0.2266	0.371
70	0.2300	0.366	71	0.2333	0.361	72	0.2366	0.356
73	0.2400	0.351	74	0.2433	0.345	75	0.2466	0.340
76	0.2500	0.335	77	0.2533	0.330	78	0.2566	0.326
79	0.2600	0.321	80	0.2633	0.317	81	0.2666	0.311
82	0.2700	0.308	83	0.2733	0.302	84	0.2766	0.298
85	0.2800	0.295	86	0.2833	0.291	87	0.2866	0.285
88	0.2900	0.282	89	0.2933	0.278	90	0.2966	0.274
91	0.3000	0.271	92	0.3033	0.266	93	0.3066	0.263
94	0.3100	0.258	95	0.3133	0.255	96	0.3166	0.252
97	0.3200	0.248	98	0.3233	0.244	99	0.3266	0.240
100	0.3300	0.237	101	0.3333	0.233	102	0.3500	0.216
103	0.3666	0.200	104	0.3833	0.184	105	0.4000	0.170
106	0.4166	0.157	107	0.4333	0.145	108	0.4500	0.134
109	0.4666	0.123	110	0.4833	0.113	111	0.5000	0.106
112	0.5166	0.097	113	0.5333	0.091	114	0.5500	0.084
115	0.5666	0.076	116	0.5833	0.071	117	0.6000	0.065
118	0.6166	0.061	119	0.6333	0.056	120	0.6500	0.052
121	0.6666	0.048	122	0.6833	0.044	123	0.7000	0.041
124	0.7166	0.037	125	0.7333	0.035	126	0.7500	0.031
127	0.7666	0.030	128	0.7833	0.028	129	0.8000	0.026
130	0.8166	0.024	131	0.8333	0.022	132	0.8500	0.020
133	0.8666	0.018	134	0.8833	0.017	135	0.9000	0.015
136	0.9166	0.015	137	0.9333	0.013	138	0.9500	0.013
139	0.9666	0.011	140	0.9833	0.011	141	1.0000	0.009
142	1.2000	0.002						

HUORSLEU SLUG TEST ANALYSIS
Fort Devens - Groups 3&6
G3M-93-08X TEST 1



Fort Devens - Groups 3&6
G3M-93-08X TEST 2
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 3.32E+01 ft/day
1.17E-02 cm/sec

Basic Time Lag: 0.22 m

2.3 Times Basic Time Lag: 0.51 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 3.42E+01 ft/day
1.21E-02 cm/sec

Time Coordinate T1: 0.2 m

Time Coordinate T2: 1.4 m

Head Ratio Coordinate H1: 50.12E-02

Head Ratio Coordinate H2: 19.95E-04

Well/Aquifer Parameters

Length of well screen: 8.47 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
1	0.0000	1.000	2	0.0033	0.980	3	0.0066	0.959
4	0.0100	0.951	5	0.0133	0.943	6	0.0166	0.923
7	0.0200	0.906	8	0.0233	0.896	9	0.0266	0.876
10	0.0300	0.870	11	0.0333	0.860	12	0.0366	0.846
13	0.0400	0.832	14	0.0433	0.821	15	0.0466	0.808

16	0.0500	0.797	17	0.0533	0.785	18	0.0566	0.774
19	0.0600	0.763	20	0.0633	0.751	21	0.0666	0.740
22	0.0700	0.730	23	0.0733	0.719	24	0.0766	0.710
25	0.0800	0.699	26	0.0833	0.689	27	0.0866	0.680
28	0.0900	0.670	29	0.0933	0.659	30	0.0966	0.650
31	0.1000	0.642	32	0.1033	0.633	33	0.1066	0.623
34	0.1100	0.614	35	0.1133	0.606	36	0.1166	0.597
37	0.1200	0.589	38	0.1233	0.580	39	0.1266	0.572
40	0.1300	0.565	41	0.1333	0.556	42	0.1366	0.548
43	0.1400	0.540	44	0.1433	0.533	45	0.1466	0.525
46	0.1500	0.518	47	0.1533	0.510	48	0.1566	0.503
49	0.1600	0.495	50	0.1633	0.490	51	0.1666	0.482
52	0.1700	0.475	53	0.1733	0.469	54	0.1766	0.462
55	0.1800	0.454	56	0.1833	0.448	57	0.1866	0.442
58	0.1900	0.435	59	0.1933	0.429	60	0.1966	0.423
61	0.2000	0.416	62	0.2033	0.410	63	0.2066	0.405
64	0.2100	0.399	65	0.2133	0.394	66	0.2166	0.388
67	0.2200	0.382	68	0.2233	0.376	69	0.2266	0.371
70	0.2300	0.365	71	0.2333	0.360	72	0.2366	0.356
73	0.2400	0.350	74	0.2433	0.345	75	0.2466	0.340
76	0.2500	0.335	77	0.2533	0.329	78	0.2566	0.326
79	0.2600	0.320	80	0.2633	0.316	81	0.2666	0.312
82	0.2700	0.307	83	0.2733	0.303	84	0.2766	0.298
85	0.2800	0.293	86	0.2833	0.290	87	0.2866	0.286
88	0.2900	0.280	89	0.2933	0.277	90	0.2966	0.273
91	0.3000	0.269	92	0.3033	0.265	93	0.3066	0.262
94	0.3100	0.258	95	0.3133	0.254	96	0.3166	0.250
97	0.3200	0.246	98	0.3233	0.243	99	0.3266	0.239
100	0.3300	0.237	101	0.3333	0.233	102	0.3500	0.216
103	0.3666	0.199	104	0.3833	0.184	105	0.4000	0.169
106	0.4166	0.156	107	0.4333	0.145	108	0.4500	0.134
109	0.4666	0.124	110	0.4833	0.114	111	0.5000	0.105
112	0.5166	0.098	113	0.5333	0.090	114	0.5500	0.083
115	0.5666	0.077	116	0.5833	0.072	117	0.6000	0.066
118	0.6166	0.060	119	0.6333	0.056	120	0.6500	0.052
121	0.6666	0.049	122	0.6833	0.045	123	0.7000	0.041
124	0.7166	0.038	125	0.7333	0.036	126	0.7500	0.032
127	0.7666	0.030	128	0.7833	0.028	129	0.8000	0.026
130	0.8166	0.024	131	0.8333	0.022	132	0.8500	0.020
133	0.8666	0.018	134	0.8833	0.017	135	0.9000	0.017
136	0.9166	0.015	137	0.9333	0.013	138	0.9500	0.013
139	0.9666	0.011	140	0.9833	0.011	141	1.0000	0.009
142	1.2000	0.004						

BOUWER AND RICE INTERACTIVE SLUG TEST ANALYSIS

09-17-1993

Fort Devens - Groups 3&6
G3M-93-08X TEST 1
Russell Johnson

Results

Hydraulic Conductivity: 2.57E+01 ft/day
9.05E-03 cm/sec
Y-Intercept (Y₀): 1.79E+00 ft
Well Screen Ratio (L_e/r_w): 20.4
Dimensionless Parameter A: 2.22
Dimensionless Parameter B: 0.33
Slope of Line [ln(Y₀/Y_t)/t]: 4.695E+00 1/min
Well Parameters (R_c² / 2*L_e): 1.706E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.224

Well/Aquifer Parameters

Depth of well: 30.15 ft
Length of well screen: 8.47 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0000	1.693	2	0.0033	1.661	3	0.0066	1.639
4	0.0100	1.601	5	0.0133	1.582	6	0.0166	1.557
7	0.0200	1.535	8	0.0233	1.513	9	0.0266	1.491
10	0.0300	1.472	11	0.0333	1.450	12	0.0366	1.428
13	0.0400	1.409	14	0.0433	1.390	15	0.0466	1.368
16	0.0500	1.349	17	0.0533	1.330	18	0.0566	1.311
19	0.0600	1.289	20	0.0633	1.273	21	0.0666	1.254
22	0.0700	1.238	23	0.0733	1.219	24	0.0766	1.203

25	0.0800	1.184	26	0.0833	1.169	27	0.0866	1.153
28	0.0900	1.134	29	0.0933	1.118	30	0.0966	1.102
31	0.1000	1.086	32	0.1033	1.071	33	0.1066	1.055
34	0.1100	1.042	35	0.1133	1.026	36	0.1166	1.014
37	0.1200	0.998	38	0.1233	0.985	39	0.1266	0.970
40	0.1300	0.957	41	0.1333	0.944	42	0.1366	0.928
43	0.1400	0.916	44	0.1433	0.903	45	0.1466	0.891
46	0.1500	0.878	47	0.1533	0.865	48	0.1566	0.853
49	0.1600	0.840	50	0.1633	0.827	51	0.1666	0.818
52	0.1700	0.805	53	0.1733	0.793	54	0.1766	0.780
55	0.1800	0.770	56	0.1833	0.761	57	0.1866	0.748
58	0.1900	0.736	59	0.1933	0.726	60	0.1966	0.717
61	0.2000	0.707	62	0.2033	0.695	63	0.2066	0.685
64	0.2100	0.676	65	0.2133	0.666	66	0.2166	0.657
67	0.2200	0.647	68	0.2233	0.638	69	0.2266	0.628
70	0.2300	0.619	71	0.2333	0.612	72	0.2366	0.603
73	0.2400	0.594	74	0.2433	0.584	75	0.2466	0.575
76	0.2500	0.568	77	0.2533	0.559	78	0.2566	0.552
79	0.2600	0.543	80	0.2633	0.537	81	0.2666	0.527
82	0.2700	0.521	83	0.2733	0.511	84	0.2766	0.505
85	0.2800	0.499	86	0.2833	0.492	87	0.2866	0.483
88	0.2900	0.477	89	0.2933	0.470	90	0.2966	0.464
91	0.3000	0.458	92	0.3033	0.451	93	0.3066	0.445
94	0.3100	0.436	95	0.3133	0.432	96	0.3166	0.426
97	0.3200	0.420	98	0.3233	0.413	99	0.3266	0.407
100	0.3300	0.401	101	0.3333	0.394	102	0.3500	0.366
103	0.3666	0.338	104	0.3833	0.312	105	0.4000	0.287
106	0.4166	0.265	107	0.4333	0.246	108	0.4500	0.227
109	0.4666	0.208	110	0.4833	0.192	111	0.5000	0.180
112	0.5166	0.164	113	0.5333	0.154	114	0.5500	0.142
115	0.5666	0.129	116	0.5833	0.120	117	0.6000	0.110
118	0.6166	0.104	119	0.6333	0.094	120	0.6500	0.088
121	0.6666	0.082	122	0.6833	0.075	123	0.7000	0.069
124	0.7166	0.063	125	0.7333	0.060	126	0.7500	0.053
127	0.7666	0.050	128	0.7833	0.047	129	0.8000	0.044
130	0.8166	0.041	131	0.8333	0.037	132	0.8500	0.034
133	0.8666	0.031	134	0.8833	0.028	135	0.9000	0.025
136	0.9166	0.025	137	0.9333	0.022	138	0.9500	0.022
139	0.9666	0.018	140	0.9833	0.018	141	1.0000	0.015
142	1.2000	0.003						

Fort Devens - Groups 3&6
G3M-93-08X TEST 2
Russell Johnson

Results

Hydraulic Conductivity: 2.52E+01 ft/day
8.90E-03 cm/sec
Y-Intercept (Yo): 1.74E+00 ft
Well Screen Ratio (Le/rw): 20.4
Dimensionless Parameter A: 2.22
Dimensionless Parameter B: 0.33
Slope of Line $[\ln(Y_o/Y_t)/t]$: 4.620E+00 1/min
Well Parameters $(Rc^2 / 2 * Le)$: 1.706E-03 ft
Dimensionless Ratio $[\ln(Re/rw)]$: 2.224

Well/Aquifer Parameters

Depth of well: 30.15 ft
Length of well screen: 8.47 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0000	1.677	2	0.0033	1.643	3	0.0066	1.608
4	0.0100	1.595	5	0.0133	1.582	6	0.0166	1.548
7	0.0200	1.519	8	0.0233	1.503	9	0.0266	1.469
10	0.0300	1.459	11	0.0333	1.443	12	0.0366	1.418
13	0.0400	1.396	14	0.0433	1.377	15	0.0466	1.355
16	0.0500	1.336	17	0.0533	1.317	18	0.0566	1.298
19	0.0600	1.279	20	0.0633	1.260	21	0.0666	1.241
22	0.0700	1.225	23	0.0733	1.206	24	0.0766	1.191

25	0.0800	1.172	26	0.0833	1.156	27	0.0866	1.140
28	0.0900	1.124	29	0.0933	1.105	30	0.0966	1.090
31	0.1000	1.077	32	0.1033	1.061	33	0.1066	1.045
34	0.1100	1.030	35	0.1133	1.017	36	0.1166	1.001
37	0.1200	0.988	38	0.1233	0.973	39	0.1266	0.960
40	0.1300	0.947	41	0.1333	0.932	42	0.1366	0.919
43	0.1400	0.906	44	0.1433	0.894	45	0.1466	0.881
46	0.1500	0.868	47	0.1533	0.856	48	0.1566	0.843
49	0.1600	0.830	50	0.1633	0.821	51	0.1666	0.808
52	0.1700	0.796	53	0.1733	0.786	54	0.1766	0.774
55	0.1800	0.761	56	0.1833	0.752	57	0.1866	0.742
58	0.1900	0.729	59	0.1933	0.720	60	0.1966	0.710
61	0.2000	0.698	62	0.2033	0.688	63	0.2066	0.679
64	0.2100	0.669	65	0.2133	0.660	66	0.2166	0.650
67	0.2200	0.641	68	0.2233	0.631	69	0.2266	0.622
70	0.2300	0.612	71	0.2333	0.603	72	0.2366	0.597
73	0.2400	0.587	74	0.2433	0.578	75	0.2466	0.571
76	0.2500	0.562	77	0.2533	0.552	78	0.2566	0.546
79	0.2600	0.537	80	0.2633	0.530	81	0.2666	0.524
82	0.2700	0.515	83	0.2733	0.508	84	0.2766	0.499
85	0.2800	0.492	86	0.2833	0.486	87	0.2866	0.480
88	0.2900	0.470	89	0.2933	0.464	90	0.2966	0.458
91	0.3000	0.451	92	0.3033	0.445	93	0.3066	0.439
94	0.3100	0.432	95	0.3133	0.426	96	0.3166	0.420
97	0.3200	0.413	98	0.3233	0.407	99	0.3266	0.401
100	0.3300	0.398	101	0.3333	0.391	102	0.3500	0.363
103	0.3666	0.334	104	0.3833	0.309	105	0.4000	0.284
106	0.4166	0.262	107	0.4333	0.243	108	0.4500	0.224
109	0.4666	0.208	110	0.4833	0.192	111	0.5000	0.176
112	0.5166	0.164	113	0.5333	0.151	114	0.5500	0.139
115	0.5666	0.129	116	0.5833	0.120	117	0.6000	0.110
118	0.6166	0.101	119	0.6333	0.094	120	0.6500	0.088
121	0.6666	0.082	122	0.6833	0.075	123	0.7000	0.069
124	0.7166	0.063	125	0.7333	0.060	126	0.7500	0.053
127	0.7666	0.050	128	0.7833	0.047	129	0.8000	0.044
130	0.8166	0.041	131	0.8333	0.037	132	0.8500	0.034
133	0.8666	0.031	134	0.8833	0.028	135	0.9000	0.028
136	0.9166	0.025	137	0.9333	0.022	138	0.9500	0.022
139	0.9666	0.018	140	0.9833	0.018	141	1.0000	0.015
142	1.2000	0.006						

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 0

SETUP	TEST I.D. φφ8φ1	DATE	6/30/93	BY WHOM	R. JOHNSON
MONITORING WELL ID			G3M-93-08X		D. PIERCE
DATE OF TEST			6/30/93		
TYPE OF TEST			RISING HEAD #1		
HERMIT TYPE/SERIAL#			SE1000C/1KC01732		
TEST #			SEL 0 / 1 OF 2		
DATA COLLECTION RATE			LOG 1		
TRANSDUCER					
SERIAL #			PTX-161/2045DE		
PSIG			10		
SCALE FACTOR			9.987		
OFFSET			-0.036		
INPUT CHANNEL			# 1		
TEST DATA					
INPUT MODE (TOC/SUR)			TOC		
STATIC WATER LEVEL (FT./TOC)			21.69 (PVC)		
WELL DEPTH (FT./TOC)			30.15 "		
XD DEPTH (FT. TOC) BELOW 0			17.98 FT		
INITIAL XD REFERENCE			0.00 FT		
SLUG DEPTH (FT./TOC)			21.90		
TIME OF SLUG PLACEMENT			939		
TIME OF WL EQUILIBRATION			942		
NEW XD REFERENCE			0.02 FT		8.00 - 7.98
START TIME OF TEST			944		
END TIME OF TEST			950		
NOTES:					

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

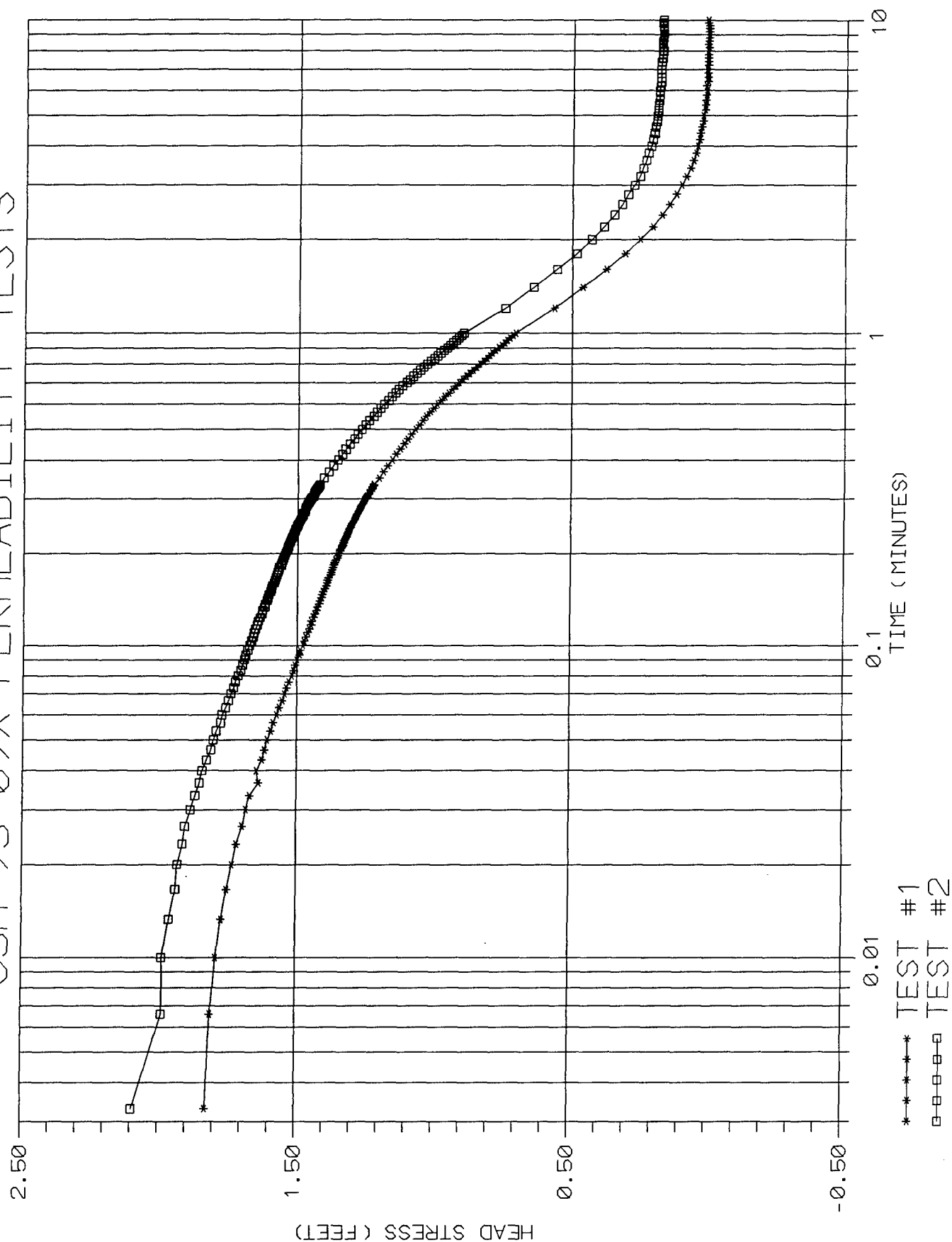
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 1

SETUP	TEST ID <u>00302</u>	DATE	BY WHOM
MONITORING WELL ID	<u>G3M-93-08X</u>	<u>R. JOHNSON +</u> <u>D. PIERCE</u>	
DATE OF TEST	<u>6/30/93</u>		
TYPE OF TEST	<u>Rising head #2</u>		
HERMIT TYPE/SERIAL#	<u>SE1000C/1K01732</u>		
TEST #	<u>SEL 1 / 2 OF 2</u>		
DATA COLLECTION RATE	<u>Log 1</u>		
TRANSDUCER			
SERIAL #	<u>PTX-161/2045DE</u>		
PSIG	<u>10</u>		
SCALE FACTOR	<u>9.987</u>		
OFFSET	<u>-0.036</u>		
INPUT CHANNEL	<u>1</u>		
TEST DATA			
INPUT MODE (TOC/SUR)	<u>TOC</u>		
STATIC WATER LEVEL (FT./TOC)	<u>21.68 (A/C)</u>		
WELL DEPTH (FT./TOC)	<u>30.15 "</u>		
XD DEPTH (FT./TOC) <u>below</u>	<u>7.98</u>		
INITIAL XD REFERENCE	<u>0.00</u>		
SLUG DEPTH (FT./TOC)	<u>21.90 (P/C)</u>		
TIME OF SLUG PLACEMENT	<u>10⁰⁰</u>		
TIME OF WL EQUILIBRATION	<u>10⁰²</u>		
NEW XD REFERENCE	<u>8.00</u> <u>0.02</u>	<u>8.00 - 7.98</u>	
START TIME OF TEST	<u>10⁰²</u>		
END TIME OF TEST	<u>10¹²</u>		
NOTES:	<u>NOTE TEST ID SHOULD HAVE BEEN 00302</u>		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

G3M-93-09X PERMEABILITY TESTS



Fort Devens - Groups 3&6
G3M-93-09X Test 1
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 9.97E+00 ft/day
3.52E-03 cm/sec

Basic Time Lag: 0.98 m

2.3 Times Basic Time Lag: 2.25 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 9.01E+00 ft/day
3.18E-03 cm/sec

Time Coordinate T1: 0.7 m

Time Coordinate T2: 6.6 m

Head Ratio Coordinate H1: 46.21E-02

Head Ratio Coordinate H2: 19.77E-04

Well/Aquifer Parameters

Length of well screen: 5.51 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

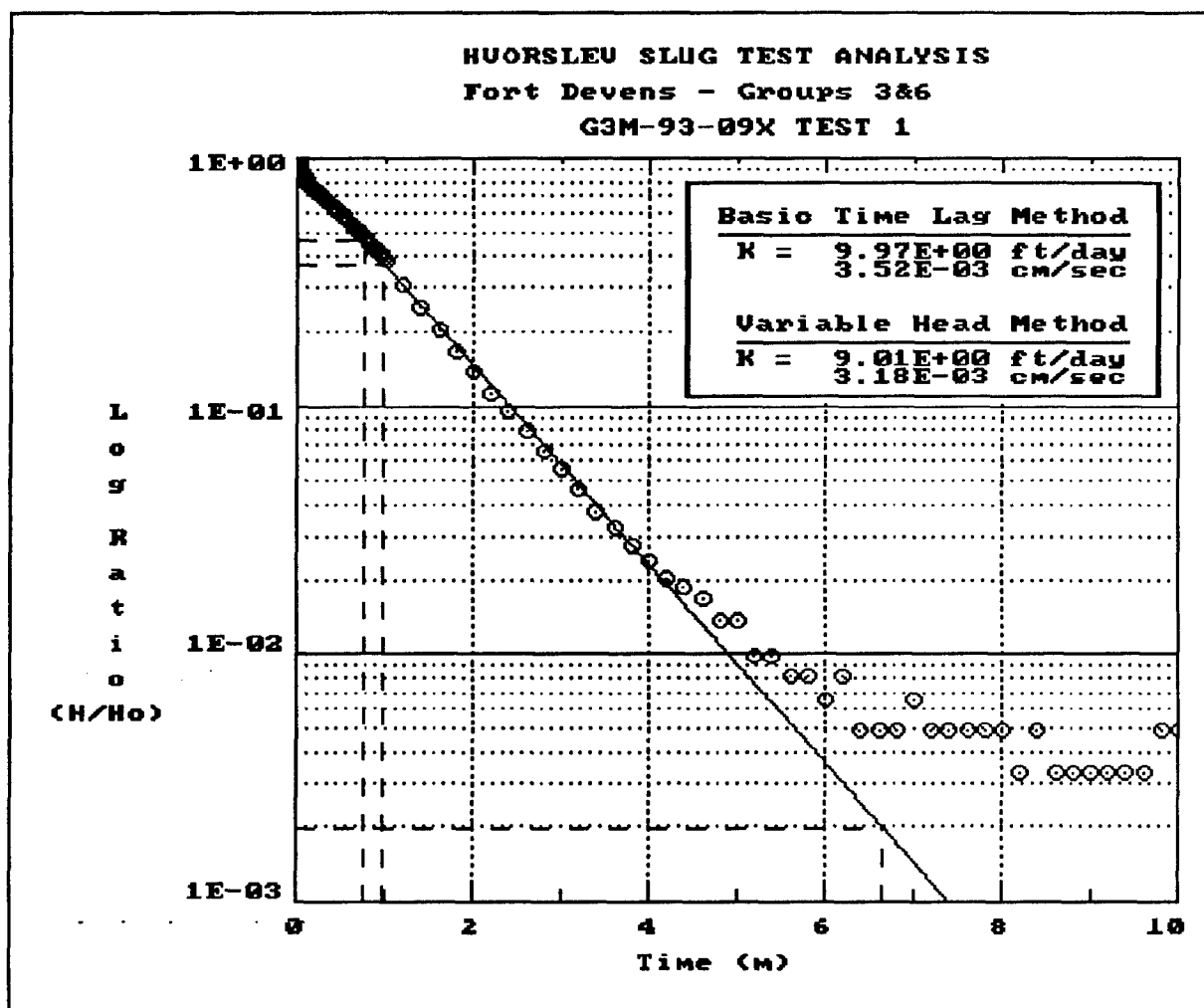
Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0033	1.000	2	0.0066	0.991	3	0.0100	0.981
4	0.0133	0.970	5	0.0166	0.960	6	0.0200	0.950
7	0.0233	0.941	8	0.0266	0.929	9	0.0300	0.922
10	0.0333	0.915	11	0.0366	0.898	12	0.0400	0.901
13	0.0433	0.891	14	0.0466	0.886	15	0.0500	0.881

16	0.0533	0.873	17	0.0566	0.869	18	0.0600	0.861
19	0.0633	0.857	20	0.0666	0.851	21	0.0700	0.846
22	0.0733	0.842	23	0.0766	0.837	24	0.0800	0.832
25	0.0833	0.829	26	0.0866	0.825	27	0.0900	0.821
28	0.0933	0.817	29	0.0966	0.815	30	0.1000	0.809
31	0.1033	0.808	32	0.1066	0.804	33	0.1100	0.801
34	0.1133	0.797	35	0.1166	0.794	36	0.1200	0.792
37	0.1233	0.789	38	0.1266	0.787	39	0.1300	0.784
40	0.1333	0.782	41	0.1366	0.778	42	0.1400	0.777
43	0.1433	0.773	44	0.1466	0.772	45	0.1500	0.770
46	0.1533	0.766	47	0.1566	0.765	48	0.1600	0.763
49	0.1633	0.761	50	0.1666	0.760	51	0.1700	0.756
52	0.1733	0.754	53	0.1766	0.752	54	0.1800	0.751
55	0.1833	0.749	56	0.1866	0.747	57	0.1900	0.745
58	0.1933	0.742	59	0.1966	0.740	60	0.2000	0.739
61	0.2033	0.737	62	0.2066	0.737	63	0.2100	0.733
64	0.2133	0.732	65	0.2166	0.730	66	0.2200	0.728
67	0.2233	0.727	68	0.2266	0.725	69	0.2300	0.723
70	0.2333	0.721	71	0.2366	0.720	72	0.2400	0.718
73	0.2433	0.716	74	0.2466	0.714	75	0.2500	0.712
76	0.2533	0.711	77	0.2566	0.709	78	0.2600	0.708
79	0.2633	0.706	80	0.2666	0.704	81	0.2700	0.702
82	0.2733	0.700	83	0.2766	0.699	84	0.2800	0.697
85	0.2833	0.696	86	0.2866	0.694	87	0.2900	0.692
88	0.2933	0.690	89	0.2966	0.688	90	0.3000	0.687
91	0.3033	0.685	92	0.3066	0.683	93	0.3100	0.680
94	0.3133	0.680	95	0.3166	0.676	96	0.3200	0.676
97	0.3233	0.673	98	0.3266	0.673	99	0.3300	0.671
100	0.3333	0.669	101	0.3500	0.659	102	0.3666	0.651
103	0.3833	0.642	104	0.4000	0.633	105	0.4166	0.626
106	0.4333	0.617	107	0.4500	0.609	108	0.4666	0.602
109	0.4833	0.595	110	0.5000	0.587	111	0.5166	0.579
112	0.5333	0.572	113	0.5500	0.566	114	0.5666	0.557
115	0.5833	0.550	116	0.6000	0.543	117	0.6166	0.536
118	0.6333	0.529	119	0.6500	0.521	120	0.6666	0.514
121	0.6833	0.507	122	0.7000	0.500	123	0.7166	0.493
124	0.7333	0.486	125	0.7500	0.479	126	0.7666	0.472
127	0.7833	0.465	128	0.8000	0.458	129	0.8166	0.451
130	0.8333	0.445	131	0.8500	0.439	132	0.8666	0.434
133	0.8833	0.427	134	0.9000	0.422	135	0.9166	0.415
136	0.9333	0.410	137	0.9500	0.405	138	0.9666	0.399
139	0.9833	0.393	140	1.0000	0.387	141	1.2000	0.309
142	1.4000	0.252	143	1.6000	0.205	144	1.8000	0.168
145	2.0000	0.138	146	2.2000	0.112	147	2.4000	0.095
148	2.6000	0.079	149	2.8000	0.066	150	3.0000	0.055
151	3.2000	0.047	152	3.4000	0.038	153	3.6000	0.033

154	3.8000	0.027	155	4.0000	0.024	156	4.2000	0.020
157	4.4000	0.019	158	4.6000	0.017	159	4.8000	0.014
160	5.0000	0.014	161	5.2000	0.010	162	5.4000	0.010
163	5.6000	0.008	164	5.8000	0.008	165	6.0000	0.007
166	6.2000	0.008	167	6.4000	0.005	168	6.6000	0.005
169	6.8000	0.005	170	7.0000	0.007	171	7.2000	0.005
172	7.4000	0.005	173	7.6000	0.005	174	7.8000	0.005
175	8.0000	0.005	176	8.2000	0.003	177	8.4000	0.005
178	8.6000	0.003	179	8.8000	0.003	180	9.0000	0.003
181	9.2000	0.003	182	9.4000	0.003	183	9.6000	0.003
184	9.8000	0.005	185	10.0000	0.005	186	0.0000	1.000



154	3.8000	0.027	155	4.0000	0.024	156	4.2000	0.020
157	4.4000	0.019	158	4.6000	0.017	159	4.8000	0.014
160	5.0000	0.014	161	5.2000	0.010	162	5.4000	0.010
163	5.6000	0.008	164	5.8000	0.008	165	6.0000	0.007
166	6.2000	0.008	167	6.4000	0.005	168	6.6000	0.005
169	6.8000	0.005	170	7.0000	0.007	171	7.2000	0.005
172	7.4000	0.005	173	7.6000	0.005	174	7.8000	0.005
175	8.0000	0.005	176	8.2000	0.003	177	8.4000	0.005
178	8.6000	0.003	179	8.8000	0.003	180	9.0000	0.003
181	9.2000	0.003	182	9.4000	0.003	183	9.6000	0.003
184	9.8000	0.005	185	10.0000	0.005	186	0.0000	1.000

Fort Devens - Groups 3&6
G3M-93-09X Test 2
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 8.35E+00 ft/day
2.95E-03 cm/sec

Basic Time Lag: 1.17 m

2.3 Times Basic Time Lag: 2.69 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 7.17E+00 ft/day
2.53E-03 cm/sec

Time Coordinate T1: 0.6 m

Time Coordinate T2: 5.5 m

Head Ratio Coordinate H1: 55.83E-02

Head Ratio Coordinate H2: 15.63E-03

Well/Aquifer Parameters

Length of well screen: 5.51 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
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1	0.0033	1.000	2	0.0066	0.949	3	0.0100	0.949
4	0.0133	0.937	5	0.0166	0.926	6	0.0200	0.923
7	0.0233	0.914	8	0.0266	0.910	9	0.0300	0.901
10	0.0333	0.893	11	0.0366	0.885	12	0.0400	0.881
13	0.0433	0.873	14	0.0466	0.866	15	0.0500	0.862

16	0.0533	0.857	17	0.0566	0.849	18	0.0600	0.846
19	0.0633	0.840	20	0.0666	0.836	21	0.0700	0.831
22	0.0733	0.827	23	0.0766	0.824	24	0.0800	0.819
25	0.0833	0.815	26	0.0866	0.811	27	0.0900	0.809
28	0.0933	0.806	29	0.0966	0.802	30	0.1000	0.799
31	0.1033	0.797	32	0.1066	0.793	33	0.1100	0.792
34	0.1133	0.789	35	0.1166	0.786	36	0.1200	0.785
37	0.1233	0.781	38	0.1266	0.778	39	0.1300	0.777
40	0.1333	0.774	41	0.1366	0.772	42	0.1400	0.769
43	0.1433	0.768	44	0.1466	0.766	45	0.1500	0.763
46	0.1533	0.762	47	0.1566	0.760	48	0.1600	0.757
49	0.1633	0.755	50	0.1666	0.754	51	0.1700	0.753
52	0.1733	0.751	53	0.1766	0.750	54	0.1800	0.748
55	0.1833	0.745	56	0.1866	0.744	57	0.1900	0.742
58	0.1933	0.741	59	0.1966	0.739	60	0.2000	0.738
61	0.2033	0.736	62	0.2066	0.734	63	0.2100	0.733
64	0.2133	0.732	65	0.2166	0.730	66	0.2200	0.729
67	0.2233	0.727	68	0.2266	0.725	69	0.2300	0.724
70	0.2333	0.723	71	0.2366	0.721	72	0.2400	0.720
73	0.2433	0.718	74	0.2466	0.716	75	0.2500	0.715
76	0.2533	0.713	77	0.2566	0.712	78	0.2600	0.711
79	0.2633	0.709	80	0.2666	0.707	81	0.2700	0.707
82	0.2733	0.704	83	0.2766	0.703	84	0.2800	0.703
85	0.2833	0.702	86	0.2866	0.700	87	0.2900	0.698
88	0.2933	0.697	89	0.2966	0.695	90	0.3000	0.694
91	0.3033	0.692	92	0.3066	0.689	93	0.3100	0.689
94	0.3133	0.688	95	0.3166	0.686	96	0.3200	0.685
97	0.3233	0.683	98	0.3266	0.682	99	0.3300	0.680
100	0.3333	0.679	101	0.3500	0.671	102	0.3666	0.662
103	0.3833	0.655	104	0.4000	0.647	105	0.4166	0.639
106	0.4333	0.634	107	0.4500	0.626	108	0.4666	0.618
109	0.4833	0.612	110	0.5000	0.605	111	0.5166	0.599
112	0.5333	0.593	113	0.5500	0.585	114	0.5666	0.579
115	0.5833	0.573	116	0.6000	0.567	117	0.6166	0.560
118	0.6333	0.553	119	0.6500	0.547	120	0.6666	0.542
121	0.6833	0.535	122	0.7000	0.528	123	0.7166	0.522
124	0.7333	0.516	125	0.7500	0.510	126	0.7666	0.504
127	0.7833	0.498	128	0.8000	0.492	129	0.8166	0.486
130	0.8333	0.479	131	0.8500	0.474	132	0.8666	0.469
133	0.8833	0.463	134	0.9000	0.457	135	0.9166	0.452
136	0.9333	0.448	137	0.9500	0.442	138	0.9666	0.437
139	0.9833	0.433	140	1.0000	0.428	141	1.2000	0.356
142	1.4000	0.306	143	1.6000	0.266	144	1.8000	0.231
145	2.0000	0.205	146	2.2000	0.184	147	2.4000	0.166
148	2.6000	0.152	149	2.8000	0.142	150	3.0000	0.131
151	3.2000	0.122	152	3.4000	0.116	153	3.6000	0.111

154	3.8000	0.107	155	4.0000	0.102	156	4.2000	0.099
157	4.4000	0.096	158	4.6000	0.095	159	4.8000	0.093
160	5.0000	0.092	161	5.2000	0.090	162	5.4000	0.090
163	5.6000	0.089	164	5.8000	0.089	165	6.0000	0.089
166	6.2000	0.087	167	6.4000	0.086	168	6.6000	0.086
169	6.8000	0.086	170	7.0000	0.086	171	7.2000	0.086
172	7.4000	0.086	173	7.6000	0.084	174	7.8000	0.084
175	8.0000	0.083	176	8.2000	0.084	177	8.4000	0.084
178	8.6000	0.084	179	8.8000	0.083	180	9.0000	0.083
181	9.2000	0.083	182	9.4000	0.083	183	9.6000	0.083
184	9.8000	0.084	185	10.0000	0.083	186	0.0000	1.000

Fort Devens - Groups 3&6
G3M-93-09X TEST 1
Russell Johnson

Results

Hydraulic Conductivity: 6.51E+00 ft/day
2.30E-03 cm/sec
Y-Intercept (Y₀): 1.67E+00 ft
Well Screen Ratio (L_e/r_w): 13.3
Dimensionless Parameter A: 1.97
Dimensionless Parameter B: 0.30
Slope of Line [ln(Y₀/Y_t)/t]: 9.227E-01 1/min
Well Parameters (R_c² / 2*L_e): 2.623E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 1.869

Well/Aquifer Parameters

Depth of well: 24.18 ft
Length of well screen: 5.51 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.826	2	0.0066	1.810	3	0.0100	1.791
4	0.0133	1.772	5	0.0166	1.753	6	0.0200	1.734
7	0.0233	1.718	8	0.0266	1.696	9	0.0300	1.684
10	0.0333	1.671	11	0.0366	1.639	12	0.0400	1.646
13	0.0433	1.627	14	0.0466	1.617	15	0.0500	1.608
16	0.0533	1.595	17	0.0566	1.586	18	0.0600	1.573
19	0.0633	1.564	20	0.0666	1.554	21	0.0700	1.545
22	0.0733	1.538	23	0.0766	1.529	24	0.0800	1.519

25	0.0833	1.513	26	0.0866	1.507	27	0.0900	1.500
28	0.0933	1.491	29	0.0966	1.488	30	0.1000	1.478
31	0.1033	1.475	32	0.1066	1.469	33	0.1100	1.462
34	0.1133	1.456	35	0.1166	1.450	36	0.1200	1.447
37	0.1233	1.440	38	0.1266	1.437	39	0.1300	1.431
40	0.1333	1.428	41	0.1366	1.421	42	0.1400	1.418
43	0.1433	1.412	44	0.1466	1.409	45	0.1500	1.406
46	0.1533	1.399	47	0.1566	1.396	48	0.1600	1.393
49	0.1633	1.390	50	0.1666	1.387	51	0.1700	1.380
52	0.1733	1.377	53	0.1766	1.374	54	0.1800	1.371
55	0.1833	1.368	56	0.1866	1.364	57	0.1900	1.361
58	0.1933	1.355	59	0.1966	1.352	60	0.2000	1.349
61	0.2033	1.345	62	0.2066	1.345	63	0.2100	1.339
64	0.2133	1.336	65	0.2166	1.333	66	0.2200	1.330
67	0.2233	1.327	68	0.2266	1.323	69	0.2300	1.320
70	0.2333	1.317	71	0.2366	1.314	72	0.2400	1.311
73	0.2433	1.308	74	0.2466	1.304	75	0.2500	1.301
76	0.2533	1.298	77	0.2566	1.295	78	0.2600	1.292
79	0.2633	1.289	80	0.2666	1.285	81	0.2700	1.282
82	0.2733	1.279	83	0.2766	1.276	84	0.2800	1.273
85	0.2833	1.270	86	0.2866	1.267	87	0.2900	1.263
88	0.2933	1.260	89	0.2966	1.257	90	0.3000	1.254
91	0.3033	1.251	92	0.3066	1.248	93	0.3100	1.241
94	0.3133	1.241	95	0.3166	1.235	96	0.3200	1.235
97	0.3233	1.229	98	0.3266	1.229	99	0.3300	1.225
100	0.3333	1.222	101	0.3500	1.203	102	0.3666	1.188
103	0.3833	1.172	104	0.4000	1.156	105	0.4166	1.143
106	0.4333	1.127	107	0.4500	1.112	108	0.4666	1.099
109	0.4833	1.086	110	0.5000	1.071	111	0.5166	1.058
112	0.5333	1.045	113	0.5500	1.033	114	0.5666	1.017
115	0.5833	1.004	116	0.6000	0.992	117	0.6166	0.979
118	0.6333	0.966	119	0.6500	0.951	120	0.6666	0.938
121	0.6833	0.925	122	0.7000	0.913	123	0.7166	0.900
124	0.7333	0.887	125	0.7500	0.875	126	0.7666	0.862
127	0.7833	0.849	128	0.8000	0.837	129	0.8166	0.824
130	0.8333	0.812	131	0.8500	0.802	132	0.8666	0.793
133	0.8833	0.780	134	0.9000	0.770	135	0.9166	0.758
136	0.9333	0.748	137	0.9500	0.739	138	0.9666	0.729
139	0.9833	0.717	140	1.0000	0.707	141	1.2000	0.565
142	1.4000	0.461	143	1.6000	0.375	144	1.8000	0.306
145	2.0000	0.252	146	2.2000	0.205	147	2.4000	0.173
148	2.6000	0.145	149	2.8000	0.120	150	3.0000	0.101
151	3.2000	0.085	152	3.4000	0.069	153	3.6000	0.060
154	3.8000	0.050	155	4.0000	0.044	156	4.2000	0.037
157	4.4000	0.034	158	4.6000	0.031	159	4.8000	0.025
160	5.0000	0.025	161	5.2000	0.018	162	5.4000	0.018

163	5.6000	0.015	164	5.8000	0.015	165	6.0000	0.012
166	6.2000	0.015	167	6.4000	0.009	168	6.6000	0.009
169	6.8000	0.009	170	7.0000	0.012	171	7.2000	0.009
172	7.4000	0.009	173	7.6000	0.009	174	7.8000	0.009
175	8.0000	0.009	176	8.2000	0.006	177	8.4000	0.009
178	8.6000	0.006	179	8.8000	0.006	180	9.0000	0.006
181	9.2000	0.006	182	9.4000	0.006	183	9.6000	0.006
184	9.8000	0.009	185	10.0000	0.009	186	0.0000	1.000

Fort Devens - Groups 3&6
G3M-93-09X TEST 2
Russell Johnson

Results

Hydraulic Conductivity: 5.18E+00 ft/day
1.83E-03 cm/sec
Y-Intercept (Y_o): 1.83E+00 ft
Well Screen Ratio (L_e/r_w): 13.3
Dimensionless Parameter A: 1.97
Dimensionless Parameter B: 0.30
Slope of Line [ln(Y_o/Y_t)/t]: 7.339E-01 1/min
Well Parameters (R_c² / 2*L_e): 2.623E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 1.869

Well/Aquifer Parameters

Depth of well: 24.18 ft
Length of well screen: 5.51 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	2.094	2	0.0066	1.987	3	0.0100	1.987
4	0.0133	1.962	5	0.0166	1.940	6	0.0200	1.933
7	0.0233	1.914	8	0.0266	1.905	9	0.0300	1.886
10	0.0333	1.870	11	0.0366	1.854	12	0.0400	1.845
13	0.0433	1.829	14	0.0466	1.813	15	0.0500	1.804
16	0.0533	1.794	17	0.0566	1.778	18	0.0600	1.772
19	0.0633	1.759	20	0.0666	1.750	21	0.0700	1.740
22	0.0733	1.731	23	0.0766	1.725	24	0.0800	1.715

25	0.0833	1.706	26	0.0866	1.699	27	0.0900	1.693
28	0.0933	1.687	29	0.0966	1.680	30	0.1000	1.674
31	0.1033	1.668	32	0.1066	1.661	33	0.1100	1.658
34	0.1133	1.652	35	0.1166	1.646	36	0.1200	1.643
37	0.1233	1.636	38	0.1266	1.630	39	0.1300	1.627
40	0.1333	1.620	41	0.1366	1.617	42	0.1400	1.611
43	0.1433	1.608	44	0.1466	1.605	45	0.1500	1.598
46	0.1533	1.595	47	0.1566	1.592	48	0.1600	1.586
49	0.1633	1.582	50	0.1666	1.579	51	0.1700	1.576
52	0.1733	1.573	53	0.1766	1.570	54	0.1800	1.567
55	0.1833	1.560	56	0.1866	1.557	57	0.1900	1.554
58	0.1933	1.551	59	0.1966	1.548	60	0.2000	1.545
61	0.2033	1.541	62	0.2066	1.538	63	0.2100	1.535
64	0.2133	1.532	65	0.2166	1.529	66	0.2200	1.526
67	0.2233	1.522	68	0.2266	1.519	69	0.2300	1.516
70	0.2333	1.513	71	0.2366	1.510	72	0.2400	1.507
73	0.2433	1.503	74	0.2466	1.500	75	0.2500	1.497
76	0.2533	1.494	77	0.2566	1.491	78	0.2600	1.488
79	0.2633	1.485	80	0.2666	1.481	81	0.2700	1.481
82	0.2733	1.475	83	0.2766	1.472	84	0.2800	1.472
85	0.2833	1.469	86	0.2866	1.466	87	0.2900	1.462
88	0.2933	1.459	89	0.2966	1.456	90	0.3000	1.453
91	0.3033	1.450	92	0.3066	1.443	93	0.3100	1.443
94	0.3133	1.440	95	0.3166	1.437	96	0.3200	1.434
97	0.3233	1.431	98	0.3266	1.428	99	0.3300	1.424
100	0.3333	1.421	101	0.3500	1.406	102	0.3666	1.387
103	0.3833	1.371	104	0.4000	1.355	105	0.4166	1.339
106	0.4333	1.327	107	0.4500	1.311	108	0.4666	1.295
109	0.4833	1.282	110	0.5000	1.267	111	0.5166	1.254
112	0.5333	1.241	113	0.5500	1.225	114	0.5666	1.213
115	0.5833	1.200	116	0.6000	1.188	117	0.6166	1.172
118	0.6333	1.159	119	0.6500	1.146	120	0.6666	1.134
121	0.6833	1.121	122	0.7000	1.105	123	0.7166	1.093
124	0.7333	1.080	125	0.7500	1.067	126	0.7666	1.055
127	0.7833	1.042	128	0.8000	1.030	129	0.8166	1.017
130	0.8333	1.004	131	0.8500	0.992	132	0.8666	0.982
133	0.8833	0.970	134	0.9000	0.957	135	0.9166	0.947
136	0.9333	0.938	137	0.9500	0.925	138	0.9666	0.916
139	0.9833	0.906	140	1.0000	0.897	141	1.2000	0.745
142	1.4000	0.641	143	1.6000	0.556	144	1.8000	0.483
145	2.0000	0.429	146	2.2000	0.385	147	2.4000	0.347
148	2.6000	0.319	149	2.8000	0.297	150	3.0000	0.274
151	3.2000	0.255	152	3.4000	0.243	153	3.6000	0.233
154	3.8000	0.224	155	4.0000	0.214	156	4.2000	0.208
157	4.4000	0.202	158	4.6000	0.199	159	4.8000	0.195
160	5.0000	0.192	161	5.2000	0.189	162	5.4000	0.189

163	5.6000	0.186	164	5.8000	0.186	165	6.0000	0.186
166	6.2000	0.183	167	6.4000	0.180	168	6.6000	0.180
169	6.8000	0.180	170	7.0000	0.180	171	7.2000	0.180
172	7.4000	0.180	173	7.6000	0.176	174	7.8000	0.176
175	8.0000	0.173	176	8.2000	0.176	177	8.4000	0.176
178	8.6000	0.176	179	8.8000	0.173	180	9.0000	0.173
181	9.2000	0.173	182	9.4000	0.173	183	9.6000	0.173
184	9.8000	0.176	185	10.0000	0.173	186	0.0000	1.000

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 6

SETUP	TEST ID $\phi\phi9\phi1$	DATE	BY WHOM
MONITORING WELL ID	G3M-93-09X	R. JOHNSON D. PIERCE	
DATE OF TEST	6/30/93		
TYPE OF TEST	RISING HEAD #1		
HERMIT TYPE/SERIAL#	SE1000C/1KCO1732		
TEST #	SEL 6 / 1 OF 2		
DATA COLLECTION RATE	LOG 1		
TRANSDUCER			
SERIAL #	PTX-161/2045DE		
PSIG	10		
SCALE FACTOR	9.987		
OFFSET	- 0.036		
INPUT CHANNEL	1		
TEST DATA			
INPUT MODE (TOC/SUR)	TOC		
STATIC WATER LEVEL (FT./TOC)	24.18' 18.67	18.67 (PVC)	
WELL DEPTH (FT./TOC)	24.18' (PVC)		
XD DEPTH (FT./TOC) below ∇	5.43		
INITIAL XD REFERENCE	0.00		
SLUG DEPTH (FT./TOC)	18.90 (NC)		
TIME OF SLUG PLACEMENT	1320		
TIME OF WL EQUILIBRATION	1325		
NEW XD REFERENCE	8.02	(5.45 - 5.43)	
START TIME OF TEST	1326		
END TIME OF TEST	1337		
NOTES:			

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

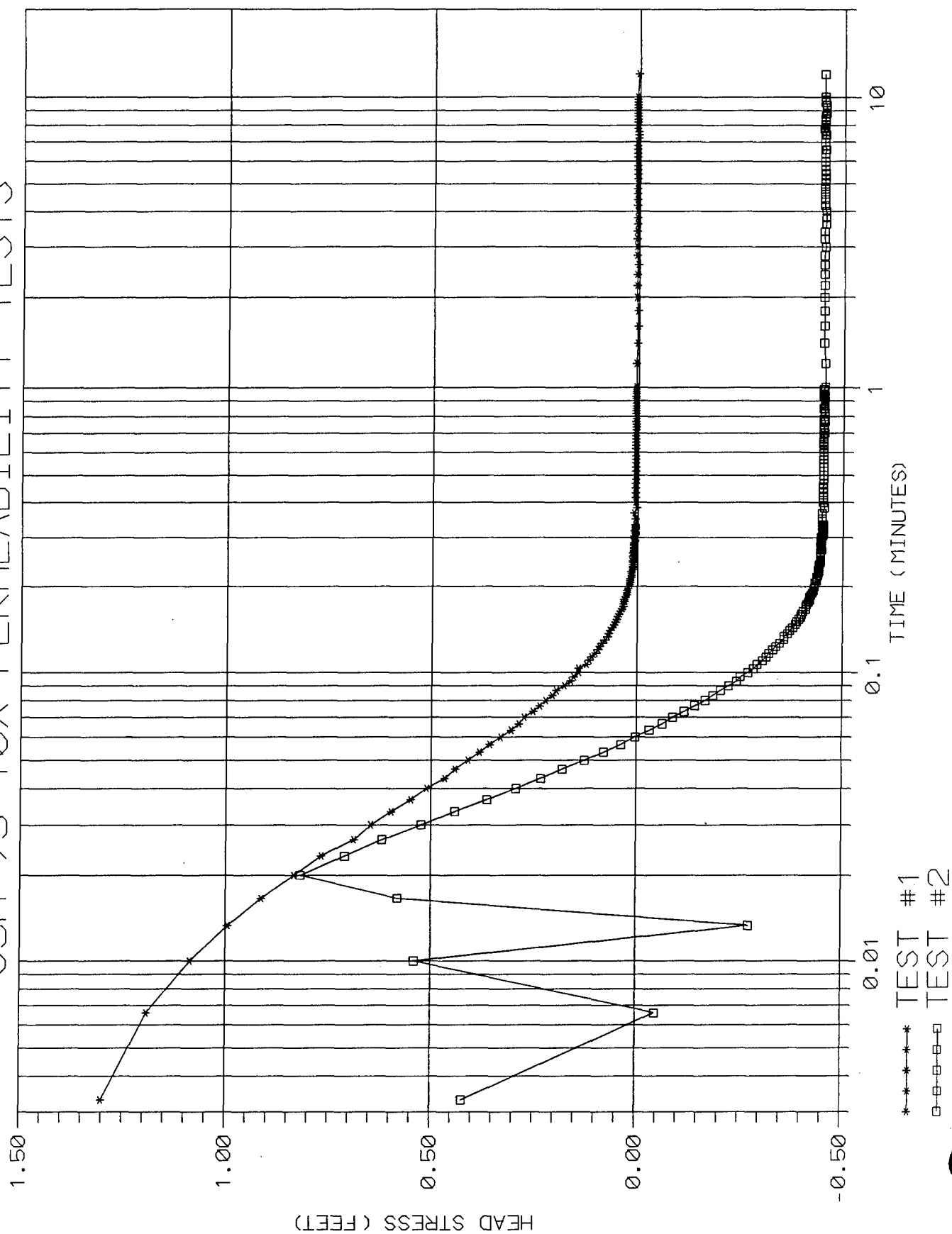
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 7

SETUP	TEST ID 00902	DATE	BY WHOM
MONITORING WELL ID	G3M-93-09X	R. JOHNSON D. PIERCE	
DATE OF TEST	6-30-93		
TYPE OF TEST	RISEING HEAD #2		
HERMIT TYPE/SERIAL#	SE1000C/1KCO1732		
TEST #	SEL 7 (2 OF 2)		
DATA COLLECTION RATE	LOG 1		
TRANSDUCER			
SERIAL #	PTX-161/20450E		
PSIG	10		
SCALE FACTOR	9.987		
OFFSET	-0.036		
INPUT CHANNEL	1		
TEST DATA			
INPUT MODE (TOC/SUR)	TOC		
STATIC WATER LEVEL (FT./TOC)	18.67 (PVC)		
WELL DEPTH (FT./TOC)	24.18 "		
XD DEPTH (FT./TOC) BELOW V	5.43		
INITIAL XD REFERENCE	0.00		
SLUG DEPTH (FT./TOC)	18.05		
TIME OF SLUG PLACEMENT	1339		
TIME OF WL EQUILIBRATION	1345		
NEW XD REFERENCE	0.02	(5.45 - 5.43)	
START TIME OF TEST	1346		
END TIME OF TEST	1403		
NOTES:	stabilized at 0.17		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

G3M-93-10X PERMEABILITY TESTS



HVORSLEV INTERACTIVE SLUG TEST ANALYSIS

07-08-1993

Fort Devens - Groups 3&6
G3M-93-10X Test 1
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 1.90E+02 ft/day
6.70E-02 cm/sec

Basic Time Lag: 0.04 m

2.3 Times Basic Time Lag: 0.10 m

(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 1.58E+02 ft/day
5.57E-02 cm/sec

Time Coordinate T1: 0.0 m

Time Coordinate T2: 0.3 m

Head Ratio Coordinate H1: 43.27E-02

Head Ratio Coordinate H2: 19.63E-04

Well/Aquifer Parameters

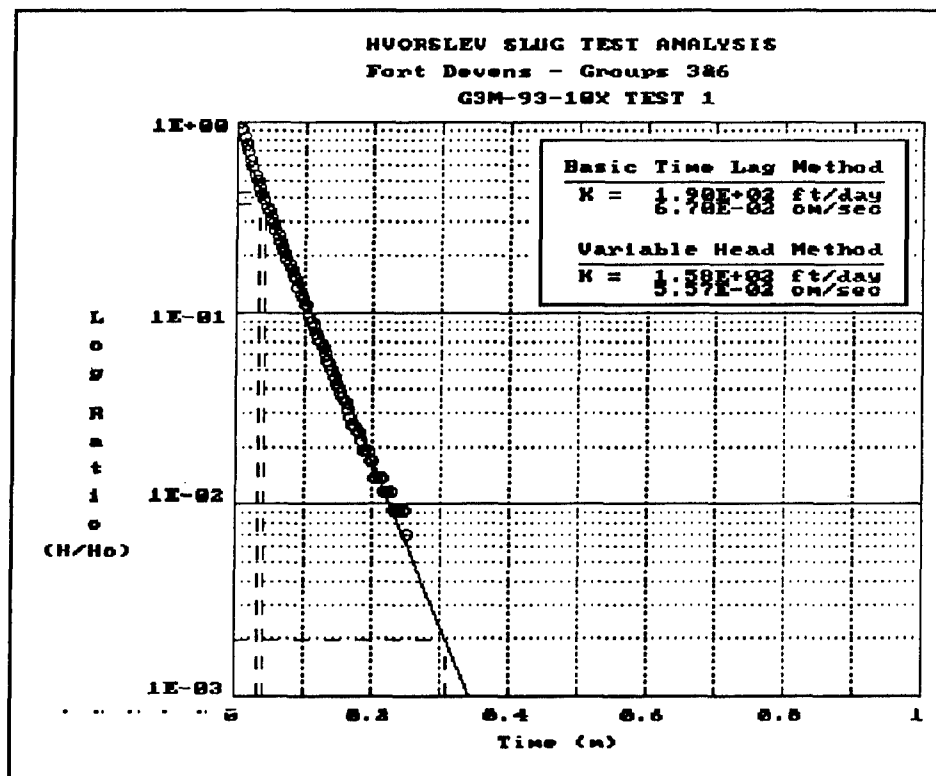
Length of well screen: 7.53 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0033	1.000	2	0.0066	0.915	3	0.0100	0.835
4	0.0133	0.765	5	0.0166	0.702	6	0.0200	0.641
7	0.0233	0.590	8	0.0266	0.529	9	0.0300	0.497
10	0.0333	0.459	11	0.0366	0.422	12	0.0400	0.393
13	0.0433	0.359	14	0.0466	0.340	15	0.0500	0.315

16	0.0533	0.294	17	0.0566	0.274	18	0.0600	0.254
19	0.0633	0.235	20	0.0666	0.221	21	0.0700	0.211
22	0.0733	0.194	23	0.0766	0.181	24	0.0800	0.170
25	0.0833	0.158	26	0.0866	0.150	27	0.0900	0.135
28	0.0933	0.124	29	0.0966	0.118	30	0.1000	0.109
31	0.1033	0.109	32	0.1066	0.095	33	0.1100	0.089
34	0.1133	0.085	35	0.1166	0.078	36	0.1200	0.072
37	0.1233	0.070	38	0.1266	0.065	39	0.1300	0.060
40	0.1333	0.055	41	0.1366	0.053	42	0.1400	0.051
43	0.1433	0.046	44	0.1466	0.043	45	0.1500	0.041
46	0.1533	0.038	47	0.1566	0.036	48	0.1600	0.034
49	0.1633	0.032	50	0.1666	0.028	51	0.1700	0.026
52	0.1733	0.026	53	0.1766	0.024	54	0.1800	0.024
55	0.1833	0.022	56	0.1866	0.019	57	0.1900	0.019
58	0.1933	0.019	59	0.1966	0.017	60	0.2000	0.017
61	0.2033	0.014	62	0.2066	0.014	63	0.2100	0.014
64	0.2133	0.014	65	0.2166	0.012	66	0.2200	0.012
67	0.2233	0.012	68	0.2266	0.012	69	0.2300	0.009
70	0.2333	0.009	71	0.2366	0.009	72	0.2400	0.009
73	0.2433	0.009	74	0.2466	0.009	75	0.2500	0.007



16	0.0533	0.294	17	0.0566	0.274	18	0.0600	0.254
19	0.0633	0.235	20	0.0666	0.221	21	0.0700	0.211
22	0.0733	0.194	23	0.0766	0.181	24	0.0800	0.170
25	0.0833	0.158	26	0.0866	0.150	27	0.0900	0.135
28	0.0933	0.124	29	0.0966	0.118	30	0.1000	0.109
31	0.1033	0.109	32	0.1066	0.095	33	0.1100	0.089
34	0.1133	0.085	35	0.1166	0.078	36	0.1200	0.072
37	0.1233	0.070	38	0.1266	0.065	39	0.1300	0.060
40	0.1333	0.055	41	0.1366	0.053	42	0.1400	0.051
43	0.1433	0.046	44	0.1466	0.043	45	0.1500	0.041
46	0.1533	0.038	47	0.1566	0.036	48	0.1600	0.034
49	0.1633	0.032	50	0.1666	0.028	51	0.1700	0.026
52	0.1733	0.026	53	0.1766	0.024	54	0.1800	0.024
55	0.1833	0.022	56	0.1866	0.019	57	0.1900	0.019
58	0.1933	0.019	59	0.1966	0.017	60	0.2000	0.017
61	0.2033	0.014	62	0.2066	0.014	63	0.2100	0.014
64	0.2133	0.014	65	0.2166	0.012	66	0.2200	0.012
67	0.2233	0.012	68	0.2266	0.012	69	0.2300	0.009
70	0.2333	0.009	71	0.2366	0.009	72	0.2400	0.009
73	0.2433	0.009	74	0.2466	0.009	75	0.2500	0.007

Fort Devens - Groups 3&6
G3M-93-10X TEST 2 (ADJUSTED)
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 1.30E+02 ft/day
4.57E-02 cm/sec

Basic Time Lag: 0.06 m
2.3 Times Basic Time Lag: 0.14 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 2.08E+02 ft/day
7.35E-02 cm/sec

Time Coordinate T1: 0.1 m
Time Coordinate T2: 0.3 m
Head Ratio Coordinate H1: 50.12E-02
Head Ratio Coordinate H2: 19.95E-04

Well/Aquifer Parameters

Length of well screen: 7.53 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
1	0.0033	0.687	2	0.0066	0.315	3	0.0100	0.780
4	0.0133	0.135	5	0.0166	0.812	6	0.0200	1.000
7	0.0233	0.914	8	0.0266	0.842	9	0.0300	0.767
10	0.0333	0.702	11	0.0366	0.640	12	0.0400	0.584
13	0.0433	0.537	14	0.0466	0.495	15	0.0500	0.452

16	0.0533	0.415	17	0.0566	0.382	18	0.0600	0.355
19	0.0633	0.328	20	0.0666	0.302	21	0.0700	0.283
22	0.0733	0.260	23	0.0766	0.240	24	0.0800	0.220
25	0.0833	0.205	26	0.0866	0.190	27	0.0900	0.175
28	0.0933	0.160	29	0.0966	0.153	30	0.1000	0.138
31	0.1033	0.127	32	0.1066	0.120	33	0.1100	0.110
34	0.1133	0.103	35	0.1166	0.097	36	0.1200	0.090
37	0.1233	0.085	38	0.1266	0.078	39	0.1300	0.070
40	0.1333	0.070	41	0.1366	0.063	42	0.1400	0.058
43	0.1433	0.052	44	0.1466	0.048	45	0.1500	0.045
46	0.1533	0.040	47	0.1566	0.037	48	0.1600	0.035
49	0.1633	0.032	50	0.1666	0.028	51	0.1700	0.028
52	0.1733	0.025	53	0.1766	0.022	54	0.1800	0.020
55	0.1833	0.020	56	0.1866	0.017	57	0.1900	0.015
58	0.1933	0.013	59	0.1966	0.013	60	0.2000	0.010
61	0.2033	0.010	62	0.2066	0.010	63	0.2100	0.007
64	0.2133	0.007	65	0.2166	0.007	66	0.2200	0.005
67	0.2233	0.005	68	0.2266	0.002	69	0.2300	0.005
70	0.2333	0.002	71	0.2366	0.002	72	0.2400	0.002

HVORSLEV INTERACTIVE SLUG TEST ANALYSIS

11-09-1993

Fort Devens - Groups 3&6
G3M-93-10X TEST 2
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 2.26E+02 ft/day
7.96E-02 cm/sec

Basic Time Lag: 0.04 m

2.3 Times Basic Time Lag: 0.08 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 8.34E+02 ft/day
2.94E-01 cm/sec

Time Coordinate T1: 0.0 m

Time Coordinate T2: 0.1 m

Head Ratio Coordinate H1: 50.12E-02

Head Ratio Coordinate H2: 19.95E-04

Well/Aquifer Parameters

Length of well screen: 7.53 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
1	0.0033	0.517	2	0.0100	0.660	3	0.0166	0.710
4	0.0200	1.000	5	0.0233	0.868	6	0.0266	0.757
7	0.0300	0.641	8	0.0333	0.540	9	0.0366	0.444
10	0.0400	0.358	11	0.0433	0.285	12	0.0466	0.220
13	0.0500	0.154	14	0.0533	0.097	15	0.0566	0.045

16 0.0600 0.004

Fort Devens - Groups 3&6
G3M-93-10X TEST 1
Russell Johnson

Results

Hydraulic Conductivity: 1.19E+02 ft/day
4.21E-02 cm/sec
Y-Intercept (Yo): 1.10E+00 ft
Well Screen Ratio (Le/rw): 18.1
Dimensionless Parameter A: 2.14
Dimensionless Parameter B: 0.32
Slope of Line $[\ln(Y_o/Y_t)/t]$: 1.972E+01 1/min
Well Parameters $(Rc^2 / 2 * Le)$: 1.919E-03 ft
Dimensionless Ratio $[\ln(Re/rw)]$: 2.193

Well/Aquifer Parameters

Depth of well: 35.00 ft
Length of well screen: 7.53 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.301	2	0.0066	1.191	3	0.0100	1.086
4	0.0133	0.995	5	0.0166	0.913	6	0.0200	0.834
7	0.0233	0.767	8	0.0266	0.688	9	0.0300	0.647
10	0.0333	0.597	11	0.0366	0.549	12	0.0400	0.511
13	0.0433	0.467	14	0.0466	0.442	15	0.0500	0.410
16	0.0533	0.382	17	0.0566	0.357	18	0.0600	0.331
19	0.0633	0.306	20	0.0666	0.287	21	0.0700	0.274
22	0.0733	0.252	23	0.0766	0.236	24	0.0800	0.221

25	0.0833	0.205	26	0.0866	0.195	27	0.0900	0.176
28	0.0933	0.161	29	0.0966	0.154	30	0.1000	0.142
31	0.1033	0.142	32	0.1066	0.123	33	0.1100	0.116
34	0.1133	0.110	35	0.1166	0.101	36	0.1200	0.094
37	0.1233	0.091	38	0.1266	0.085	39	0.1300	0.078
40	0.1333	0.072	41	0.1366	0.069	42	0.1400	0.066
43	0.1433	0.060	44	0.1466	0.056	45	0.1500	0.053
46	0.1533	0.050	47	0.1566	0.047	48	0.1600	0.044
49	0.1633	0.041	50	0.1666	0.037	51	0.1700	0.034
52	0.1733	0.034	53	0.1766	0.031	54	0.1800	0.031
55	0.1833	0.028	56	0.1866	0.025	57	0.1900	0.025
58	0.1933	0.025	59	0.1966	0.022	60	0.2000	0.022
61	0.2033	0.018	62	0.2066	0.018	63	0.2100	0.018
64	0.2133	0.018	65	0.2166	0.015	66	0.2200	0.015
67	0.2233	0.015	68	0.2266	0.015	69	0.2300	0.012
70	0.2333	0.012	71	0.2366	0.012	72	0.2400	0.012
73	0.2433	0.012	74	0.2466	0.012	75	0.2500	0.009

Fort Devens - Groups 3&6
G3M-93-10X TEST 2
Russell Johnson

Results

Hydraulic Conductivity: 1.58E+02 ft/day
5.56E-02 cm/sec
Y-Intercept (Y₀): 2.33E+00 ft
Well Screen Ratio (L_e/r_w): 18.1
Dimensionless Parameter A: 2.14
Dimensionless Parameter B: 0.32
Slope of Line [ln(Y₀/Y_t)/t]: 2.600E+01 1/min
Well Parameters (R_c² / 2*L_e): 1.919E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.193

Well/Aquifer Parameters

Depth of well: 35.00 ft
Length of well screen: 7.53 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	0.868	2	0.0066	0.398	3	0.0100	0.985
4	0.0133	0.171	5	0.0166	1.026	6	0.0200	1.263
7	0.0233	1.155	8	0.0266	1.064	9	0.0300	0.969
10	0.0333	0.887	11	0.0366	0.808	12	0.0400	0.738
13	0.0433	0.678	14	0.0466	0.625	15	0.0500	0.571
16	0.0533	0.524	17	0.0566	0.482	18	0.0600	0.448
19	0.0633	0.414	20	0.0666	0.382	21	0.0700	0.357
22	0.0733	0.329	23	0.0766	0.303	24	0.0800	0.278

25	0.0833	0.259	26	0.0866	0.240	27	0.0900	0.221
28	0.0933	0.202	29	0.0966	0.193	30	0.1000	0.174
31	0.1033	0.161	32	0.1066	0.152	33	0.1100	0.139
34	0.1133	0.130	35	0.1166	0.123	36	0.1200	0.114
37	0.1233	0.107	38	0.1266	0.098	39	0.1300	0.088
40	0.1333	0.088	41	0.1366	0.079	42	0.1400	0.073
43	0.1433	0.066	44	0.1466	0.060	45	0.1500	0.057
46	0.1533	0.051	47	0.1566	0.047	48	0.1600	0.044
49	0.1633	0.041	50	0.1666	0.035	51	0.1700	0.035
52	0.1733	0.032	53	0.1766	0.028	54	0.1800	0.025
55	0.1833	0.025	56	0.1866	0.022	57	0.1900	0.019
58	0.1933	0.016	59	0.1966	0.016	60	0.2000	0.013
61	0.2033	0.013	62	0.2066	0.013	63	0.2100	0.009
64	0.2133	0.009	65	0.2166	0.009	66	0.2200	0.006
67	0.2233	0.006	68	0.2266	0.003	69	0.2300	0.006
70	0.2333	0.003	71	0.2366	0.003	72	0.2400	0.003

Fort Devens - Groups 3&6
G3M-93-10X TEST 2
Russell Johnson

Results

Hydraulic Conductivity: 6.31E+02 ft/day
2.23E-01 cm/sec
Y-Intercept (Y₀): 1.22E+01 ft
Well Screen Ratio (L_e/r_w): 18.1
Dimensionless Parameter A: 2.14
Dimensionless Parameter B: 0.32
Slope of Line [ln(Y₀/Y_t)/t]: 1.042E+02 1/min
Well Parameters (R_c² / 2*L_e): 1.919E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.193

Well/Aquifer Parameters

Depth of well: 35.00 ft
Length of well screen: 7.53 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	0.423	2	0.0100	0.540	3	0.0166	0.581
4	0.0200	0.818	5	0.0233	0.710	6	0.0266	0.619
7	0.0300	0.524	8	0.0333	0.442	9	0.0366	0.363
10	0.0400	0.293	11	0.0433	0.233	12	0.0466	0.180
13	0.0500	0.126	14	0.0533	0.079	15	0.0566	0.037
16	0.0600	0.003						

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 2

SETUP	TEST ID <u>Φ1ΦΦ1</u>	DATE	BY WHOM
MONITORING WELL ID	<u>G3M-93-10X</u>	<u>R. JOHNSON + D. PIERCE</u>	
DATE OF TEST	<u>6-30-93</u>		
TYPE OF TEST	<u>RIISING HEAD #1</u>		
HERMIT TYPE/SERIAL#	<u>SE1000C/1K101732</u>		
TEST #	<u>SEL 2 / 1 OF 2</u>		
DATA COLLECTION RATE	<u>LOG 1</u>		
TRANSDUCER			
SERIAL #	<u>PTX-161/2045 DE</u>		
PSIG	<u>10</u>		
SCALE FACTOR	<u>9.987</u>		
OFFSET	<u>-0.036</u>		
INPUT CHANNEL	<u>1</u>		
TEST DATA			
INPUT MODE (TOC/SUR)	<u>TOC</u>		
STATIC WATER LEVEL (FT./TOC)	<u>27.47 (PVC)</u>		
WELL DEPTH (FT./TOC)	<u>35.00 "</u>		
XD DEPTH (FT./TOC) <u>BELOW</u> <u>▽</u>	<u>6.92</u>		
INITIAL XD REFERENCE	<u>0.00</u>		
SLUG DEPTH (FT./TOC)	<u>27.75 (PVC)</u>		
TIME OF SLUG PLACEMENT	<u>10³⁷</u>		
TIME OF WL EQUILIBRATION	<u>10⁴⁰</u>		
NEW XD REFERENCE	<u>ASSUMED 6.98 ROP 0.00</u>	<u>(6.92 - ?)</u>	
START TIME OF TEST	<u>10⁴³</u>		
END TIME OF TEST	<u>10⁵⁶</u>		
NOTES:			

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

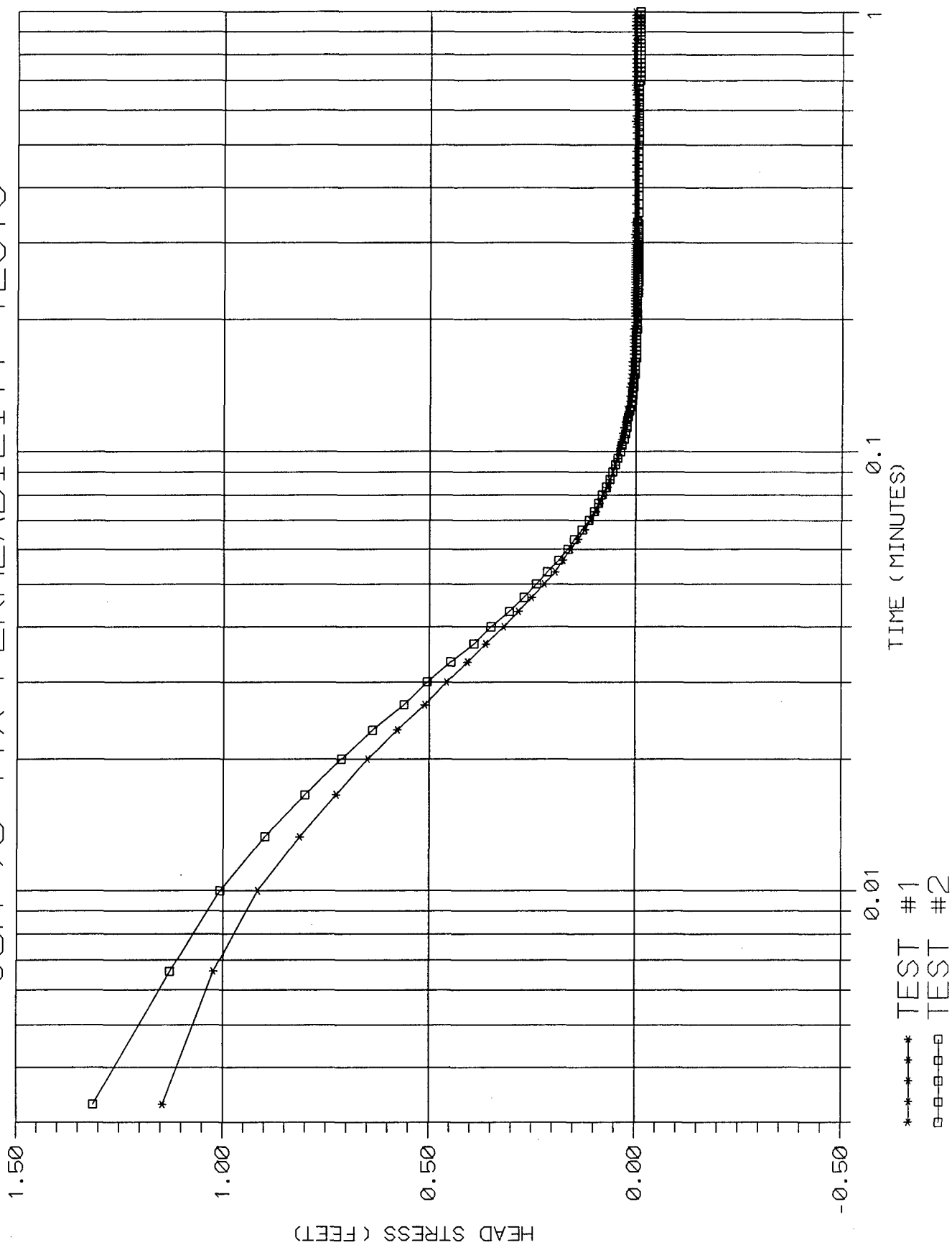
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL3

SETUP	TEST ID <u>φ1φφ2</u>	DATE	BY WHOM
MONITORING WELL ID		<u>G3M-93-10X</u>	<u>R. JOHNSON + D. PIERCE</u>
DATE OF TEST		<u>6-30-93</u>	
TYPE OF TEST		<u>RISING HEAD #2</u>	
HERMIT TYPE/SERIAL#		<u>SE1006C/1KC01732</u>	
TEST #		<u>SEL3 / 2 OF 2</u>	
DATA COLLECTION RATE		<u>LOG 1</u>	
TRANSDUCER			
SERIAL #		<u>PTX-161 / 2045 DE</u>	
PSIG		<u>10</u>	
SCALE FACTOR		<u>9.987</u>	
OFFSET		<u>-0.036</u>	
INPUT CHANNEL		<u>1</u>	
TEST DATA			
INPUT MODE (TOC/SUR)		<u>TOC</u>	
STATIC WATER LEVEL (FT./TOC)		<u>27.47 (PVC)</u>	
WELL DEPTH (FT./TOC)		<u>35.00 "</u>	
XD DEPTH (FT./TOC) <u>FT below</u>		<u>6.92</u>	
INITIAL XD REFERENCE		<u>0.00</u>	
SLUG DEPTH (FT./TOC)		<u>27.75 (PVC)</u>	
TIME OF SLUG PLACEMENT		<u>1057</u>	
TIME OF WL EQUILIBRATION		<u>1100</u>	
NEW XD REFERENCE		<u>0.06</u>	<u>6.98 - 6.92</u>
START TIME OF TEST		<u>1101</u>	
END TIME OF TEST		<u>1114</u>	
NOTES:			

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

G3M-93-11X PERMEABILITY TESTS



HVORSLEV INTERACTIVE SLUG TEST ANALYSIS

07-08-1993

Fort Devens - Groups 3&6
G3M-93-11X Test 1
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 2.80E+02 ft/day
9.86E-02 cm/sec

Basic Time Lag: 0.03 m

2.3 Times Basic Time Lag: 0.07 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 2.43E+02 ft/day
8.57E-02 cm/sec

Time Coordinate T1: 0.0 m

Time Coordinate T2: 0.2 m

Head Ratio Coordinate H1: 44.79E-02

Head Ratio Coordinate H2: 19.70E-04

Well/Aquifer Parameters

Length of well screen: 7.55 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

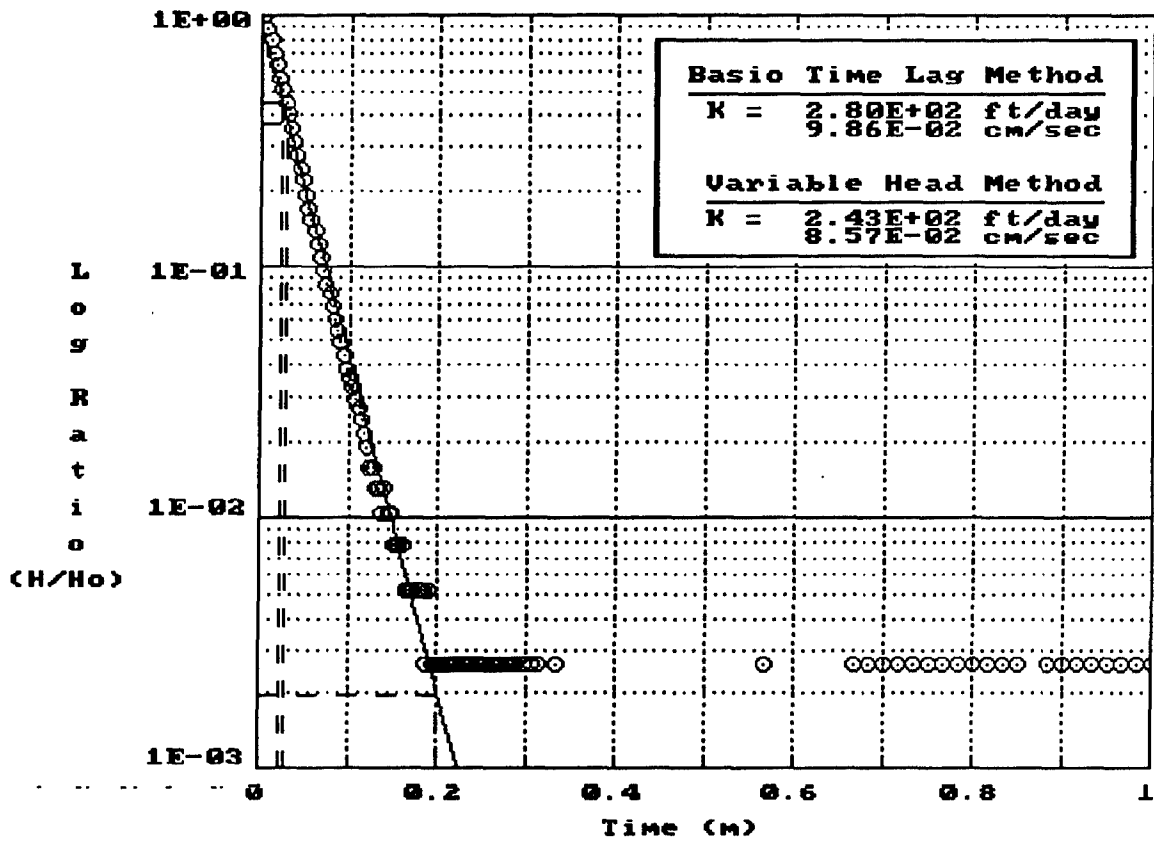
Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0033	1.000	2	0.0066	0.893	3	0.0100	0.799
4	0.0133	0.711	5	0.0166	0.634	6	0.0200	0.567
7	0.0233	0.504	8	0.0266	0.446	9	0.0300	0.400
10	0.0333	0.355	11	0.0366	0.317	12	0.0400	0.278
13	0.0433	0.248	14	0.0466	0.220	15	0.0500	0.193

16	0.0533	0.170	17	0.0566	0.154	18	0.0600	0.137
19	0.0633	0.121	20	0.0666	0.107	21	0.0700	0.096
22	0.0733	0.085	23	0.0766	0.077	24	0.0800	0.069
25	0.0833	0.060	26	0.0866	0.055	27	0.0900	0.049
28	0.0933	0.044	29	0.0966	0.038	30	0.1000	0.036
31	0.1033	0.032	32	0.1066	0.030	33	0.1100	0.027
34	0.1133	0.024	35	0.1166	0.022	36	0.1200	0.019
37	0.1233	0.016	38	0.1266	0.016	39	0.1300	0.013
40	0.1333	0.013	41	0.1366	0.010	42	0.1400	0.013
43	0.1433	0.010	44	0.1466	0.010	45	0.1500	0.008
46	0.1533	0.008	47	0.1566	0.008	48	0.1600	0.008
49	0.1633	0.005	50	0.1666	0.005	51	0.1700	0.005
52	0.1733	0.005	53	0.1766	0.005	54	0.1800	0.005
55	0.1833	0.005	56	0.1866	0.003	57	0.1900	0.005
58	0.1933	0.003	59	0.1966	0.003	60	0.2000	0.003
61	0.2033	0.003	62	0.2066	0.003	63	0.2100	0.003
64	0.2133	0.003	65	0.2166	0.003	66	0.2200	0.003
67	0.2233	0.003	68	0.2266	0.003	69	0.2300	0.003
70	0.2333	0.003	71	0.2366	0.003	72	0.2400	0.003
73	0.2433	0.003	74	0.2466	0.003	75	0.2500	0.003
76	0.2533	0.003	77	0.2566	0.003	78	0.2600	0.003
79	0.2633	0.003	80	0.2666	0.003	81	0.2700	0.003
82	0.2733	0.003	83	0.2766	0.003	84	0.2800	0.003
85	0.2833	0.003	86	0.2866	0.003	87	0.2900	0.003
88	0.2966	0.003	89	0.3066	0.003	90	0.3133	0.003
91	0.3333	0.003	92	0.5666	0.003	93	0.6666	0.003
94	0.6833	0.003	95	0.7000	0.003	96	0.7166	0.003
97	0.7333	0.003	98	0.7500	0.003	99	0.7666	0.003
100	0.7833	0.003	101	0.8000	0.003	102	0.8166	0.003
103	0.8333	0.003	104	0.8500	0.003	105	0.8833	0.003
106	0.9000	0.003	107	0.9166	0.003	108	0.9333	0.003
109	0.9500	0.003	110	0.9666	0.003	111	0.9833	0.003
112	1.0000	0.003						

HUORSLEU SLUG TEST ANALYSIS
Fort Devens - Groups 3&6
G3M-93-11X TEST 1



Fort Devens - Groups 3&6
G3M-93-11X Test 2
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 2.53E+02 ft/day
8.93E-02 cm/sec

Basic Time Lag: 0.03 m

2.3 Times Basic Time Lag: 0.07 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 3.11E+02 ft/day
1.10E-01 cm/sec

Time Coordinate T1: 0.0 m

Time Coordinate T2: 0.2 m

Head Ratio Coordinate H1: 50.12E-02

Head Ratio Coordinate H2: 19.95E-04

Well/Aquifer Parameters

Length of well screen: 7.55 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0033	1.000	2	0.0066	0.858	3	0.0100	0.766
4	0.0133	0.685	5	0.0166	0.610	6	0.0200	0.543
7	0.0233	0.486	8	0.0266	0.428	9	0.0300	0.384
10	0.0333	0.341	11	0.0366	0.298	12	0.0400	0.266
13	0.0433	0.233	14	0.0466	0.206	15	0.0500	0.183

16	0.0533	0.163	17	0.0566	0.142	18	0.0600	0.125
19	0.0633	0.113	20	0.0666	0.098	21	0.0700	0.086
22	0.0733	0.077	23	0.0766	0.069	24	0.0800	0.062
25	0.0833	0.055	26	0.0866	0.048	27	0.0900	0.043
28	0.0933	0.038	29	0.0966	0.033	30	0.1000	0.028
31	0.1033	0.026	32	0.1066	0.021	33	0.1100	0.019
34	0.1133	0.017	35	0.1166	0.017	36	0.1200	0.014
37	0.1233	0.011	38	0.1266	0.009	39	0.1300	0.009
40	0.1333	0.007	41	0.1366	0.007	42	0.1400	0.005
43	0.1433	0.005	44	0.1466	0.005	45	0.1500	0.002
46	0.1533	0.002	47	0.1566	0.002	48	0.1600	0.002

Fort Devens - Groups 3&6
G3M-93-11X TEST 1
Russell Johnson

Results

Hydraulic Conductivity: 1.84E+02 ft/day
6.49E-02 cm/sec
Y-Intercept (Y₀): 1.01E+00 ft
Well Screen Ratio (L_e/r_w): 18.2
Dimensionless Parameter A: 2.14
Dimensionless Parameter B: 0.32
Slope of Line [ln(Y₀/Y_t)/t]: 3.039E+01 1/min
Well Parameters (R_c² / 2*L_e): 1.914E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.196

Well/Aquifer Parameters

Depth of well: 35.15 ft
Length of well screen: 7.55 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.146	2	0.0066	1.023	3	0.0100	0.916
4	0.0133	0.815	5	0.0166	0.726	6	0.0200	0.650
7	0.0233	0.578	8	0.0266	0.511	9	0.0300	0.458
10	0.0333	0.407	11	0.0366	0.363	12	0.0400	0.319
13	0.0433	0.284	14	0.0466	0.252	15	0.0500	0.221
16	0.0533	0.195	17	0.0566	0.176	18	0.0600	0.157
19	0.0633	0.139	20	0.0666	0.123	21	0.0700	0.110
22	0.0733	0.097	23	0.0766	0.088	24	0.0800	0.079

25	0.0833	0.069	26	0.0866	0.063	27	0.0900	0.056
28	0.0933	0.050	29	0.0966	0.044	30	0.1000	0.041
31	0.1033	0.037	32	0.1066	0.034	33	0.1100	0.031
34	0.1133	0.028	35	0.1166	0.025	36	0.1200	0.022
37	0.1233	0.018	38	0.1266	0.018	39	0.1300	0.015
40	0.1333	0.015	41	0.1366	0.012	42	0.1400	0.015
43	0.1433	0.012	44	0.1466	0.012	45	0.1500	0.009
46	0.1533	0.009	47	0.1566	0.009	48	0.1600	0.009
49	0.1633	0.006	50	0.1666	0.006	51	0.1700	0.006
52	0.1733	0.006	53	0.1766	0.006	54	0.1800	0.006
55	0.1833	0.006	56	0.1866	0.003	57	0.1900	0.006
58	0.1933	0.003	59	0.1966	0.003	60	0.2000	0.003
61	0.2033	0.003	62	0.2066	0.003	63	0.2100	0.003
64	0.2133	0.003	65	0.2166	0.003	66	0.2200	0.003
67	0.2233	0.003	68	0.2266	0.003	69	0.2300	0.003
70	0.2333	0.003	71	0.2366	0.003	72	0.2400	0.003
73	0.2433	0.003	74	0.2466	0.003	75	0.2500	0.003
76	0.2533	0.003	77	0.2566	0.003	78	0.2600	0.003
79	0.2633	0.003	80	0.2666	0.003	81	0.2700	0.003
82	0.2733	0.003	83	0.2766	0.003	84	0.2800	0.003
85	0.2833	0.003	86	0.2866	0.003	87	0.2900	0.003
88	0.2966	0.003	89	0.3066	0.003	90	0.3133	0.003
91	0.3333	0.003	92	0.5666	0.003	93	0.6666	0.003
94	0.6833	0.003	95	0.7000	0.003	96	0.7166	0.003
97	0.7333	0.003	98	0.7500	0.003	99	0.7666	0.003
100	0.7833	0.003	101	0.8000	0.003	102	0.8166	0.003
103	0.8333	0.003	104	0.8500	0.003	105	0.8833	0.003
106	0.9000	0.003	107	0.9166	0.003	108	0.9333	0.003
109	0.9500	0.003	110	0.9666	0.003	111	0.9833	0.003
112	1.0000	0.003						

Fort Devens - Groups 3&6
G3M-93-11X TEST 2
Russell Johnson

Results

Hydraulic Conductivity: 2.36E+02 ft/day
8.31E-02 cm/sec
Y-Intercept (Y₀): 1.66E+00 ft
Well Screen Ratio (L_e/r_w): 18.2
Dimensionless Parameter A: 2.14
Dimensionless Parameter B: 0.32
Slope of Line [ln(Y₀/Y_t)/t]: 3.892E+01 1/min
Well Parameters (R_c² / 2*L_e): 1.914E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.196

Well/Aquifer Parameters

Depth of well: 35.15 ft
Length of well screen: 7.55 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.314	2	0.0066	1.128	3	0.0100	1.007
4	0.0133	0.900	5	0.0166	0.802	6	0.0200	0.714
7	0.0233	0.638	8	0.0266	0.562	9	0.0300	0.505
10	0.0333	0.448	11	0.0366	0.391	12	0.0400	0.350
13	0.0433	0.306	14	0.0466	0.271	15	0.0500	0.240
16	0.0533	0.214	17	0.0566	0.186	18	0.0600	0.164
19	0.0633	0.148	20	0.0666	0.129	21	0.0700	0.113
22	0.0733	0.101	23	0.0766	0.091	24	0.0800	0.082

25	0.0833	0.072	26	0.0866	0.063	27	0.0900	0.056
28	0.0933	0.050	29	0.0966	0.044	30	0.1000	0.037
31	0.1033	0.034	32	0.1066	0.028	33	0.1100	0.025
34	0.1133	0.022	35	0.1166	0.022	36	0.1200	0.018
37	0.1233	0.015	38	0.1266	0.012	39	0.1300	0.012
40	0.1333	0.009	41	0.1366	0.009	42	0.1400	0.006
43	0.1433	0.006	44	0.1466	0.006	45	0.1500	0.003
46	0.1533	0.003	47	0.1566	0.003	48	0.1600	0.003

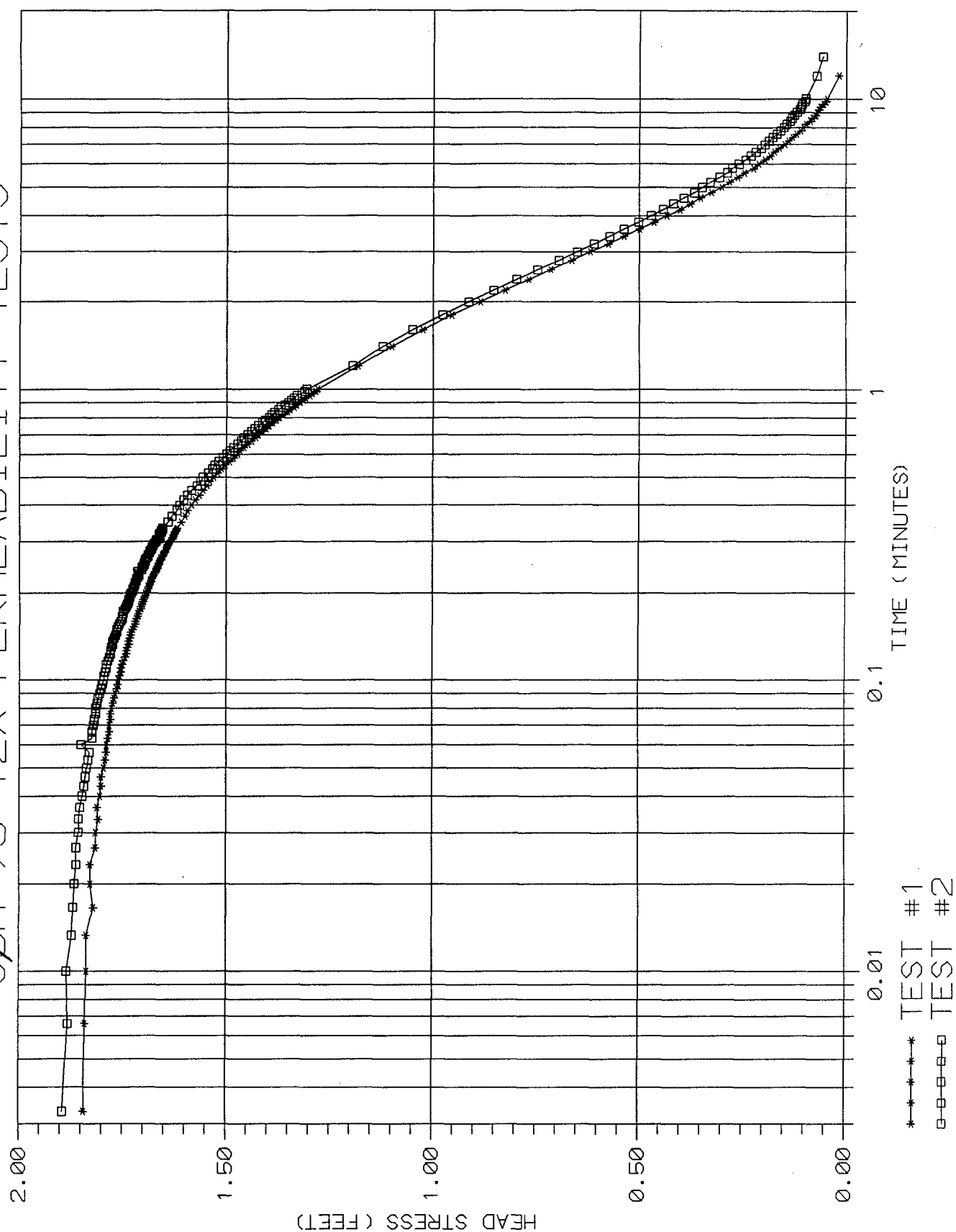
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 5

SETUP	TEST ID <u>Φ11 Φ2</u>	DATE	BY WHOM
MONITORING WELL ID	<u>G3M-93-11X</u>	<u>R. JOHNSON + D. PIERCE</u>	
DATE OF TEST	<u>6-30-93</u>		
TYPE OF TEST	<u>RISING HEAD #2</u>		
HERMIT TYPE/SERIAL#	<u>SE100DC/IKC01732</u>		
TEST #	<u>SEL 5 (2 OF 2)</u>		
DATA COLLECTION RATE	<u>LOG 1</u>		
TRANSDUCER			
SERIAL #	<u>PTX-161/2045 DE</u>		
PSIG	<u>10</u>		
SCALE FACTOR	<u>9.987</u>		
OFFSET	<u>-0.036</u>		
INPUT CHANNEL	<u>1</u>		
TEST DATA			
INPUT MODE (TOC/SUR)	<u>TOC</u>		
STATIC WATER LEVEL (FT./TOC)	<u>27.60 (PVC)</u>		
WELL DEPTH (FT./TOC)	<u>35.15 "</u>		
XD DEPTH (FT./TOC) BELOW <u>1/2</u>	<u>6.49</u>		
INITIAL XD REFERENCE	<u>0.00</u>		
SLUG DEPTH (FT./TOC)	<u>28.05</u>		
TIME OF SLUG PLACEMENT	<u>1145</u>		
TIME OF WL EQUILIBRATION	<u>1153</u>		
NEW XD REFERENCE	<u>-0.02</u>	<u>6.47 - 6.49</u>	
START TIME OF TEST	<u>1154</u>		
END TIME OF TEST	<u>1206</u>		
NOTES:			

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

6
G3M-93-12X PERMEABILITY TESTS



Fort Devens - Groups 3&6
G6M-93-12X Test 1
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 2.87E+00 ft/day
1.01E-03 cm/sec

Basic Time Lag: 2.72 m

2.3 Times Basic Time Lag: 6.26 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 2.84E+00 ft/day
1.00E-03 cm/sec

Time Coordinate T1: 1.2 m

Time Coordinate T2: 10.8 m

Head Ratio Coordinate H1: 64.28E-02

Head Ratio Coordinate H2: 19.75E-03

Well/Aquifer Parameters

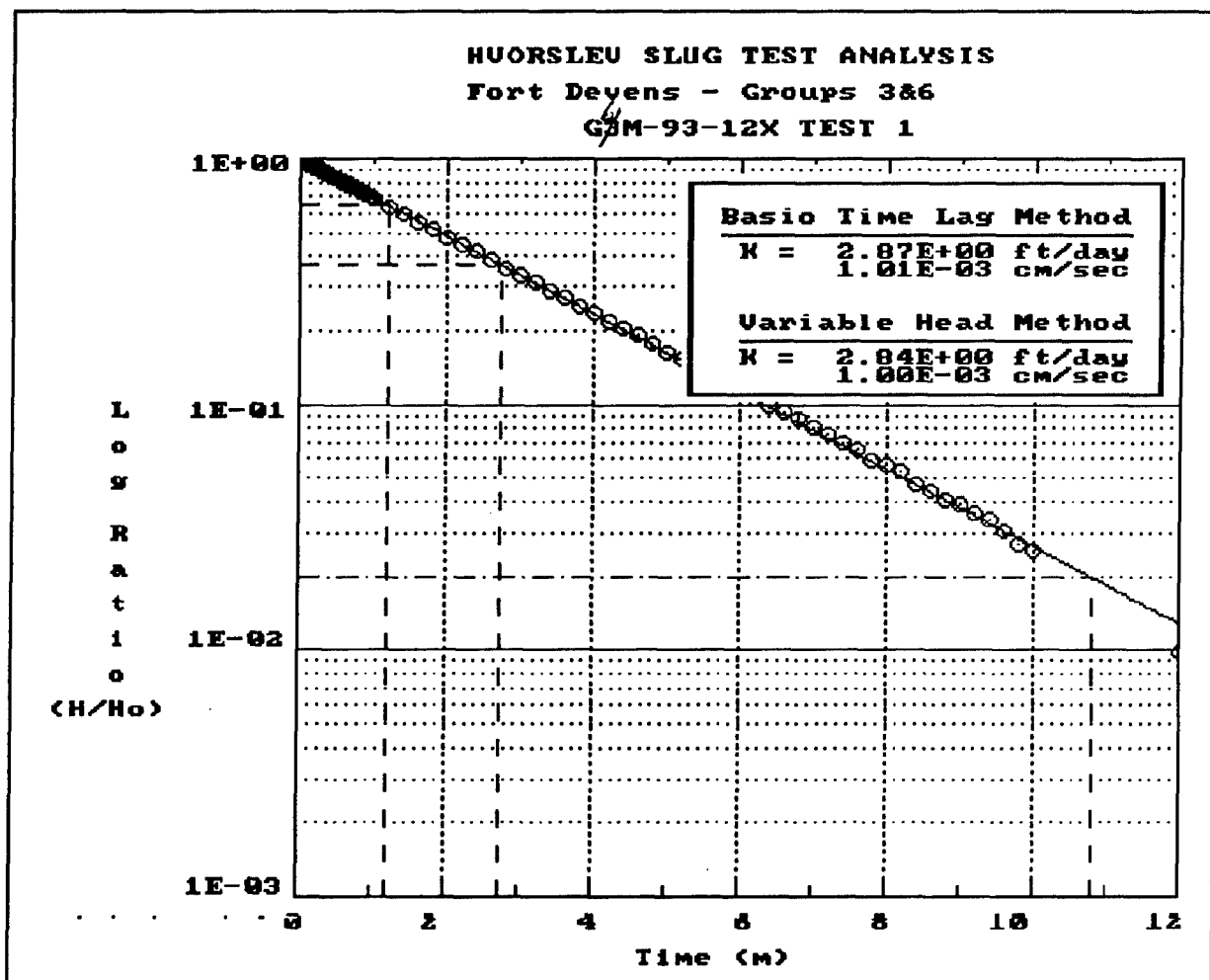
Length of well screen: 7.80 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
1	0.0033	1.000	2	0.0066	0.998	3	0.0100	0.997
4	0.0133	0.997	5	0.0166	0.988	6	0.0200	0.992
7	0.0233	0.992	8	0.0266	0.985	9	0.0300	0.985
10	0.0333	0.982	11	0.0366	0.983	12	0.0400	0.979
13	0.0433	0.978	14	0.0466	0.978	15	0.0500	0.974

16	0.0533	0.973	17	0.0566	0.971	18	0.0600	0.971
19	0.0633	0.969	20	0.0666	0.967	21	0.0700	0.967
22	0.0733	0.966	23	0.0766	0.966	24	0.0800	0.964
25	0.0833	0.963	26	0.0866	0.961	27	0.0900	0.959
28	0.0933	0.957	29	0.0966	0.956	30	0.1000	0.956
31	0.1033	0.954	32	0.1066	0.952	33	0.1100	0.952
34	0.1133	0.951	35	0.1166	0.949	36	0.1200	0.947
37	0.1233	0.945	38	0.1266	0.945	39	0.1300	0.944
40	0.1333	0.942	41	0.1366	0.942	42	0.1400	0.940
43	0.1433	0.939	44	0.1466	0.939	45	0.1500	0.937
46	0.1533	0.935	47	0.1566	0.933	48	0.1600	0.933
49	0.1633	0.932	50	0.1666	0.930	51	0.1700	0.930
52	0.1733	0.928	53	0.1766	0.926	54	0.1800	0.926
55	0.1833	0.925	56	0.1866	0.923	57	0.1900	0.923
58	0.1933	0.921	59	0.1966	0.920	60	0.2000	0.920
61	0.2033	0.918	62	0.2066	0.916	63	0.2100	0.916
64	0.2133	0.914	65	0.2166	0.914	66	0.2200	0.913
67	0.2233	0.911	68	0.2266	0.911	69	0.2300	0.909
70	0.2333	0.908	71	0.2366	0.908	72	0.2400	0.906
73	0.2433	0.904	74	0.2466	0.904	75	0.2500	0.902
76	0.2533	0.902	77	0.2566	0.901	78	0.2600	0.899
79	0.2633	0.899	80	0.2666	0.897	81	0.2700	0.897
82	0.2733	0.896	83	0.2766	0.894	84	0.2800	0.894
85	0.2833	0.892	86	0.2866	0.892	87	0.2900	0.890
88	0.2933	0.890	89	0.2966	0.889	90	0.3000	0.887
91	0.3033	0.887	92	0.3066	0.885	93	0.3100	0.885
94	0.3133	0.883	95	0.3166	0.883	96	0.3200	0.882
97	0.3233	0.882	98	0.3266	0.880	99	0.3300	0.880
100	0.3333	0.878	101	0.3500	0.873	102	0.3666	0.868
103	0.3833	0.865	104	0.4000	0.859	105	0.4166	0.855
106	0.4333	0.849	107	0.4500	0.844	108	0.4666	0.839
109	0.4833	0.836	110	0.5000	0.830	111	0.5166	0.825
112	0.5333	0.820	113	0.5500	0.815	114	0.5666	0.810
115	0.5833	0.805	116	0.6000	0.799	117	0.6166	0.796
118	0.6333	0.791	119	0.6500	0.786	120	0.6666	0.781
121	0.6833	0.775	122	0.7000	0.772	123	0.7166	0.767
124	0.7333	0.762	125	0.7500	0.758	126	0.7666	0.753
127	0.7833	0.748	128	0.8000	0.744	129	0.8166	0.740
130	0.8333	0.734	131	0.8500	0.731	132	0.8666	0.725
133	0.8833	0.722	134	0.9000	0.717	135	0.9166	0.714
136	0.9333	0.710	137	0.9500	0.705	138	0.9666	0.702
139	0.9833	0.697	140	1.0000	0.695	141	1.2000	0.641
142	1.4000	0.597	143	1.6000	0.556	144	1.8000	0.518
145	2.0000	0.480	146	2.2000	0.448	147	2.4000	0.417
148	2.6000	0.387	149	2.8000	0.360	150	3.0000	0.336
151	3.2000	0.312	152	3.4000	0.291	153	3.6000	0.271

154	3.8000	0.252	155	4.0000	0.235	156	4.2000	0.218
157	4.4000	0.204	158	4.6000	0.190	159	4.8000	0.176
160	5.0000	0.163	161	5.2000	0.152	162	5.4000	0.142
163	5.6000	0.133	164	5.8000	0.122	165	6.0000	0.114
166	6.2000	0.106	167	6.4000	0.099	168	6.6000	0.094
169	6.8000	0.087	170	7.0000	0.080	171	7.2000	0.075
172	7.4000	0.070	173	7.6000	0.065	174	7.8000	0.060
175	8.0000	0.056	176	8.2000	0.053	177	8.4000	0.048
178	8.6000	0.044	179	8.8000	0.041	180	9.0000	0.039
181	9.2000	0.036	182	9.4000	0.034	183	9.6000	0.030
184	9.8000	0.027	185	10.0000	0.026	186	12.0000	0.010



154	3.8000	0.252	155	4.0000	0.235	156	4.2000	0.218
157	4.4000	0.204	158	4.6000	0.190	159	4.8000	0.176
160	5.0000	0.163	161	5.2000	0.152	162	5.4000	0.142
163	5.6000	0.133	164	5.8000	0.122	165	6.0000	0.114
166	6.2000	0.106	167	6.4000	0.099	168	6.6000	0.094
169	6.8000	0.087	170	7.0000	0.080	171	7.2000	0.075
172	7.4000	0.070	173	7.6000	0.065	174	7.8000	0.060
175	8.0000	0.056	176	8.2000	0.053	177	8.4000	0.048
178	8.6000	0.044	179	8.8000	0.041	180	9.0000	0.039
181	9.2000	0.036	182	9.4000	0.034	183	9.6000	0.030
184	9.8000	0.027	185	10.0000	0.026	186	12.0000	0.010

Fort Devens - Groups 3&6
G6M-93-12X TEST 2
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 2.77E+00 ft/day
9.75E-04 cm/sec

Basic Time Lag: 2.83 m

2.3 Times Basic Time Lag: 6.51 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 2.69E+00 ft/day
9.49E-04 cm/sec

Time Coordinate T1: 1.3 m

Time Coordinate T2: 12.0 m

Head Ratio Coordinate H1: 61.88E-02

Head Ratio Coordinate H2: 15.81E-03

Well/Aquifer Parameters

Length of well screen: 7.80 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
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1	0.0033	1.000	2	0.0066	0.993	3	0.0100	0.995
4	0.0133	0.988	5	0.0166	0.987	6	0.0200	0.985
7	0.0233	0.983	8	0.0266	0.983	9	0.0300	0.980
10	0.0333	0.980	11	0.0366	0.978	12	0.0400	0.975
13	0.0433	0.973	14	0.0466	0.971	15	0.0500	0.970

16	0.0533	0.968	17	0.0566	0.967	18	0.0600	0.977
19	0.0633	0.963	20	0.0666	0.963	21	0.0700	0.961
22	0.0733	0.960	23	0.0766	0.958	24	0.0800	0.958
25	0.0833	0.957	26	0.0866	0.955	27	0.0900	0.953
28	0.0933	0.951	29	0.0966	0.950	30	0.1000	0.948
31	0.1033	0.948	32	0.1066	0.947	33	0.1100	0.945
34	0.1133	0.945	35	0.1166	0.943	36	0.1200	0.941
37	0.1233	0.940	38	0.1266	0.940	39	0.1300	0.938
40	0.1333	0.937	41	0.1366	0.937	42	0.1400	0.935
43	0.1433	0.933	44	0.1466	0.931	45	0.1500	0.931
46	0.1533	0.930	47	0.1566	0.928	48	0.1600	0.927
49	0.1633	0.925	50	0.1666	0.925	51	0.1700	0.923
52	0.1733	0.923	53	0.1766	0.921	54	0.1800	0.920
55	0.1833	0.918	56	0.1866	0.917	57	0.1900	0.917
58	0.1933	0.915	59	0.1966	0.915	60	0.2000	0.913
61	0.2033	0.911	62	0.2066	0.911	63	0.2100	0.910
64	0.2133	0.908	65	0.2166	0.908	66	0.2200	0.907
67	0.2233	0.907	68	0.2266	0.905	69	0.2300	0.903
70	0.2333	0.903	71	0.2366	0.905	72	0.2400	0.900
73	0.2433	0.900	74	0.2466	0.898	75	0.2500	0.897
76	0.2533	0.897	77	0.2566	0.895	78	0.2600	0.895
79	0.2633	0.893	80	0.2666	0.891	81	0.2700	0.891
82	0.2733	0.890	83	0.2766	0.890	84	0.2800	0.888
85	0.2833	0.886	86	0.2866	0.886	87	0.2900	0.885
88	0.2933	0.885	89	0.2966	0.883	90	0.3000	0.881
91	0.3033	0.881	92	0.3066	0.876	93	0.3100	0.878
94	0.3133	0.878	95	0.3166	0.878	96	0.3200	0.876
97	0.3233	0.875	98	0.3266	0.875	99	0.3300	0.873
100	0.3333	0.873	101	0.3500	0.866	102	0.3666	0.862
103	0.3833	0.855	104	0.4000	0.852	105	0.4166	0.846
106	0.4333	0.842	107	0.4500	0.836	108	0.4666	0.829
109	0.4833	0.825	110	0.5000	0.822	111	0.5166	0.815
112	0.5333	0.809	113	0.5500	0.806	114	0.5666	0.801
115	0.5833	0.796	116	0.6000	0.791	117	0.6166	0.788
118	0.6333	0.783	119	0.6500	0.778	120	0.6666	0.773
121	0.6833	0.770	122	0.7000	0.765	123	0.7166	0.760
124	0.7333	0.756	125	0.7500	0.751	126	0.7666	0.746
127	0.7833	0.743	128	0.8000	0.738	129	0.8166	0.734
130	0.8333	0.731	131	0.8500	0.726	132	0.8666	0.723
133	0.8833	0.718	134	0.9000	0.713	135	0.9166	0.710
136	0.9333	0.706	137	0.9500	0.703	138	0.9666	0.696
139	0.9833	0.693	140	1.0000	0.690	141	1.2000	0.631
142	1.4000	0.592	143	1.6000	0.554	144	1.8000	0.516
145	2.0000	0.483	146	2.2000	0.450	147	2.4000	0.421
148	2.6000	0.394	149	2.8000	0.367	150	3.0000	0.344
151	3.2000	0.322	152	3.4000	0.302	153	3.6000	0.284

154	3.8000	0.265	155	4.0000	0.249	156	4.2000	0.233
157	4.4000	0.220	158	4.6000	0.207	159	4.8000	0.193
160	5.0000	0.183	161	5.2000	0.173	162	5.4000	0.162
163	5.6000	0.152	164	5.8000	0.145	165	6.0000	0.137
166	6.2000	0.128	167	6.4000	0.121	168	6.6000	0.115
169	6.8000	0.108	170	7.0000	0.103	171	7.2000	0.098
172	7.4000	0.093	173	7.6000	0.088	174	7.8000	0.083
175	8.0000	0.080	176	8.2000	0.077	177	8.4000	0.072
178	8.6000	0.070	179	8.8000	0.067	180	9.0000	0.063
181	9.2000	0.060	182	9.4000	0.058	183	9.6000	0.056
184	9.8000	0.053	185	10.0000	0.052	186	12.0000	0.038
187	14.0000	0.030						

Fort Devens - Groups 3&6
G6M-93-12X TEST 1
Russell Johnson

Results

Hydraulic Conductivity: 1.98E+00 ft/day
6.97E-04 cm/sec
Y-Intercept (Y₀): 1.83E+00 ft
Well Screen Ratio (L_e/r_w): 18.8
Dimensionless Parameter A: 2.16
Dimensionless Parameter B: 0.33
Slope of Line [ln(Y₀/Y_t)/t]: 3.628E-01 1/min
Well Parameters (R_c² / 2*L_e): 1.853E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.042

Well/Aquifer Parameters

Depth of well: 20.20 ft
Length of well screen: 7.80 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.843	2	0.0066	1.840	3	0.0100	1.837
4	0.0133	1.837	5	0.0166	1.821	6	0.0200	1.828
7	0.0233	1.828	8	0.0266	1.815	9	0.0300	1.815
10	0.0333	1.809	11	0.0366	1.812	12	0.0400	1.805
13	0.0433	1.802	14	0.0466	1.802	15	0.0500	1.796
16	0.0533	1.793	17	0.0566	1.790	18	0.0600	1.790
19	0.0633	1.786	20	0.0666	1.783	21	0.0700	1.783
22	0.0733	1.780	23	0.0766	1.780	24	0.0800	1.777

25	0.0833	1.774	26	0.0866	1.771	27	0.0900	1.768
28	0.0933	1.764	29	0.0966	1.761	30	0.1000	1.761
31	0.1033	1.758	32	0.1066	1.755	33	0.1100	1.755
34	0.1133	1.752	35	0.1166	1.749	36	0.1200	1.745
37	0.1233	1.742	38	0.1266	1.742	39	0.1300	1.739
40	0.1333	1.736	41	0.1366	1.736	42	0.1400	1.733
43	0.1433	1.730	44	0.1466	1.730	45	0.1500	1.726
46	0.1533	1.723	47	0.1566	1.720	48	0.1600	1.720
49	0.1633	1.717	50	0.1666	1.714	51	0.1700	1.714
52	0.1733	1.711	53	0.1766	1.707	54	0.1800	1.707
55	0.1833	1.704	56	0.1866	1.701	57	0.1900	1.701
58	0.1933	1.698	59	0.1966	1.695	60	0.2000	1.695
61	0.2033	1.692	62	0.2066	1.688	63	0.2100	1.688
64	0.2133	1.685	65	0.2166	1.685	66	0.2200	1.682
67	0.2233	1.679	68	0.2266	1.679	69	0.2300	1.676
70	0.2333	1.673	71	0.2366	1.673	72	0.2400	1.669
73	0.2433	1.666	74	0.2466	1.666	75	0.2500	1.663
76	0.2533	1.663	77	0.2566	1.660	78	0.2600	1.657
79	0.2633	1.657	80	0.2666	1.654	81	0.2700	1.654
82	0.2733	1.651	83	0.2766	1.647	84	0.2800	1.647
85	0.2833	1.644	86	0.2866	1.644	87	0.2900	1.641
88	0.2933	1.641	89	0.2966	1.638	90	0.3000	1.635
91	0.3033	1.635	92	0.3066	1.631	93	0.3100	1.631
94	0.3133	1.628	95	0.3166	1.628	96	0.3200	1.625
97	0.3233	1.625	98	0.3266	1.622	99	0.3300	1.622
100	0.3333	1.619	101	0.3500	1.609	102	0.3666	1.600
103	0.3833	1.594	104	0.4000	1.584	105	0.4166	1.575
106	0.4333	1.565	107	0.4500	1.556	108	0.4666	1.546
109	0.4833	1.540	110	0.5000	1.530	111	0.5166	1.521
112	0.5333	1.511	113	0.5500	1.502	114	0.5666	1.492
115	0.5833	1.483	116	0.6000	1.473	117	0.6166	1.467
118	0.6333	1.458	119	0.6500	1.448	120	0.6666	1.439
121	0.6833	1.429	122	0.7000	1.423	123	0.7166	1.413
124	0.7333	1.404	125	0.7500	1.397	126	0.7666	1.388
127	0.7833	1.379	128	0.8000	1.372	129	0.8166	1.363
130	0.8333	1.353	131	0.8500	1.347	132	0.8666	1.337
133	0.8833	1.331	134	0.9000	1.322	135	0.9166	1.315
136	0.9333	1.309	137	0.9500	1.299	138	0.9666	1.293
139	0.9833	1.284	140	1.0000	1.280	141	1.2000	1.182
142	1.4000	1.100	143	1.6000	1.024	144	1.8000	0.955
145	2.0000	0.885	146	2.2000	0.825	147	2.4000	0.768
148	2.6000	0.714	149	2.8000	0.664	150	3.0000	0.619
151	3.2000	0.575	152	3.4000	0.537	153	3.6000	0.499
154	3.8000	0.464	155	4.0000	0.433	156	4.2000	0.401
157	4.4000	0.376	158	4.6000	0.351	159	4.8000	0.325
160	5.0000	0.300	161	5.2000	0.281	162	5.4000	0.262

163	5.6000	0.246	164	5.8000	0.224	165	6.0000	0.211
166	6.2000	0.196	167	6.4000	0.183	168	6.6000	0.173
169	6.8000	0.161	170	7.0000	0.148	171	7.2000	0.139
172	7.4000	0.129	173	7.6000	0.120	174	7.8000	0.110
175	8.0000	0.104	176	8.2000	0.098	177	8.4000	0.088
178	8.6000	0.082	179	8.8000	0.075	180	9.0000	0.072
181	9.2000	0.066	182	9.4000	0.063	183	9.6000	0.056
184	9.8000	0.050	185	10.0000	0.047	186	12.0000	0.018

Fort Devens - Groups 3&6
G6M-93-12X TEST 2
Russell Johnson

Results

Hydraulic Conductivity: 1.81E+00 ft/day
6.38E-04 cm/sec
Y-Intercept (Y₀): 1.84E+00 ft
Well Screen Ratio (L_e/r_w): 18.8
Dimensionless Parameter A: 2.16
Dimensionless Parameter B: 0.33
Slope of Line [ln(Y₀/Y_t)/t]: 3.322E-01 1/min
Well Parameters (R_c² / 2*L_e): 1.853E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.042

Well/Aquifer Parameters

Depth of well: 20.20 ft
Length of well screen: 7.80 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.894	2	0.0066	1.881	3	0.0100	1.885
4	0.0133	1.872	5	0.0166	1.869	6	0.0200	1.866
7	0.0233	1.862	8	0.0266	1.862	9	0.0300	1.856
10	0.0333	1.856	11	0.0366	1.853	12	0.0400	1.847
13	0.0433	1.843	14	0.0466	1.840	15	0.0500	1.837
16	0.0533	1.834	17	0.0566	1.831	18	0.0600	1.850
19	0.0633	1.824	20	0.0666	1.824	21	0.0700	1.821
22	0.0733	1.818	23	0.0766	1.815	24	0.0800	1.815

25	0.0833	1.812	26	0.0866	1.809	27	0.0900	1.805
28	0.0933	1.802	29	0.0966	1.799	30	0.1000	1.796
31	0.1033	1.796	32	0.1066	1.793	33	0.1100	1.790
34	0.1133	1.790	35	0.1166	1.786	36	0.1200	1.783
37	0.1233	1.780	38	0.1266	1.780	39	0.1300	1.777
40	0.1333	1.774	41	0.1366	1.774	42	0.1400	1.771
43	0.1433	1.767	44	0.1466	1.764	45	0.1500	1.764
46	0.1533	1.761	47	0.1566	1.758	48	0.1600	1.755
49	0.1633	1.752	50	0.1666	1.752	51	0.1700	1.749
52	0.1733	1.749	53	0.1766	1.745	54	0.1800	1.742
55	0.1833	1.739	56	0.1866	1.736	57	0.1900	1.736
58	0.1933	1.733	59	0.1966	1.733	60	0.2000	1.730
61	0.2033	1.726	62	0.2066	1.726	63	0.2100	1.723
64	0.2133	1.720	65	0.2166	1.720	66	0.2200	1.717
67	0.2233	1.717	68	0.2266	1.714	69	0.2300	1.711
70	0.2333	1.711	71	0.2366	1.714	72	0.2400	1.704
73	0.2433	1.704	74	0.2466	1.701	75	0.2500	1.698
76	0.2533	1.698	77	0.2566	1.695	78	0.2600	1.695
79	0.2633	1.692	80	0.2666	1.688	81	0.2700	1.688
82	0.2733	1.685	83	0.2766	1.685	84	0.2800	1.682
85	0.2833	1.679	86	0.2866	1.679	87	0.2900	1.676
88	0.2933	1.676	89	0.2966	1.673	90	0.3000	1.669
91	0.3033	1.669	92	0.3066	1.660	93	0.3100	1.663
94	0.3133	1.663	95	0.3166	1.663	96	0.3200	1.660
97	0.3233	1.657	98	0.3266	1.657	99	0.3300	1.654
100	0.3333	1.654	101	0.3500	1.641	102	0.3666	1.632
103	0.3833	1.619	104	0.4000	1.613	105	0.4166	1.603
106	0.4333	1.594	107	0.4500	1.584	108	0.4666	1.571
109	0.4833	1.562	110	0.5000	1.556	111	0.5166	1.543
112	0.5333	1.533	113	0.5500	1.527	114	0.5666	1.518
115	0.5833	1.508	116	0.6000	1.499	117	0.6166	1.492
118	0.6333	1.483	119	0.6500	1.473	120	0.6666	1.464
121	0.6833	1.458	122	0.7000	1.448	123	0.7166	1.439
124	0.7333	1.432	125	0.7500	1.423	126	0.7666	1.413
127	0.7833	1.407	128	0.8000	1.397	129	0.8166	1.391
130	0.8333	1.385	131	0.8500	1.375	132	0.8666	1.369
133	0.8833	1.360	134	0.9000	1.350	135	0.9166	1.344
136	0.9333	1.337	137	0.9500	1.331	138	0.9666	1.318
139	0.9833	1.312	140	1.0000	1.306	141	1.2000	1.195
142	1.4000	1.122	143	1.6000	1.050	144	1.8000	0.977
145	2.0000	0.914	146	2.2000	0.853	147	2.4000	0.797
148	2.6000	0.746	149	2.8000	0.695	150	3.0000	0.651
151	3.2000	0.610	152	3.4000	0.572	153	3.6000	0.537
154	3.8000	0.502	155	4.0000	0.471	156	4.2000	0.442
157	4.4000	0.417	158	4.6000	0.392	159	4.8000	0.366
160	5.0000	0.347	161	5.2000	0.328	162	5.4000	0.306

163	5.6000	0.287	164	5.8000	0.275	165	6.0000	0.259
166	6.2000	0.243	167	6.4000	0.230	168	6.6000	0.218
169	6.8000	0.205	170	7.0000	0.196	171	7.2000	0.186
172	7.4000	0.177	173	7.6000	0.167	174	7.8000	0.158
175	8.0000	0.151	176	8.2000	0.145	177	8.4000	0.136
178	8.6000	0.132	179	8.8000	0.126	180	9.0000	0.120
181	9.2000	0.113	182	9.4000	0.110	183	9.6000	0.107
184	9.8000	0.101	185	10.0000	0.098	186	12.0000	0.072
187	14.0000	0.056						

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 12

SETUP	TEST ID <u>φ12φ1</u>	DATE	BY WHOM
MONITORING WELL ID		<u>GGM-93-12X</u>	<u>R. JOHNSON</u> <u>D. PIERCE</u>
DATE OF TEST		<u>7-1-93</u>	
TYPE OF TEST		<u>RISING HEAD #1</u>	
HERMIT TYPE/SERIAL#		<u>SE1088C/1KCO1732</u>	
TEST #		<u>SEL 12 (1002)</u>	
DATA COLLECTION RATE		<u>LOG #1</u>	
TRANSDUCER			
SERIAL #		<u>PTX-161/20460E</u>	
PSIG		<u>10</u>	
SCALE FACTOR		<u>10.003</u>	
OFFSET		<u>-0.034</u>	
INPUT CHANNEL		<u>1</u>	
TEST DATA			
INPUT MODE (TOC/SUR)		<u>TOC</u>	
STATIC WATER LEVEL (FT./TOC)		<u>12.38</u>	
WELL DEPTH (FT./TOC)		<u>20.2</u>	
XD DEPTH (FT. TOE) BELOW <u>7</u>		<u>6.87</u>	
INITIAL XD REFERENCE		<u>0.00</u>	
SLUG DEPTH (FT./TOC)		<u>12.32</u>	
TIME OF SLUG PLACEMENT		<u>11:35</u>	
TIME OF WL EQUILIBRATION		<u>11:52</u>	
NEW XD REFERENCE		<u>0.03</u>	<u>(6.90 - 6.87)</u>
START TIME OF TEST		<u>11:53</u>	
END TIME OF TEST		<u>12:07</u>	
NOTES:			

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

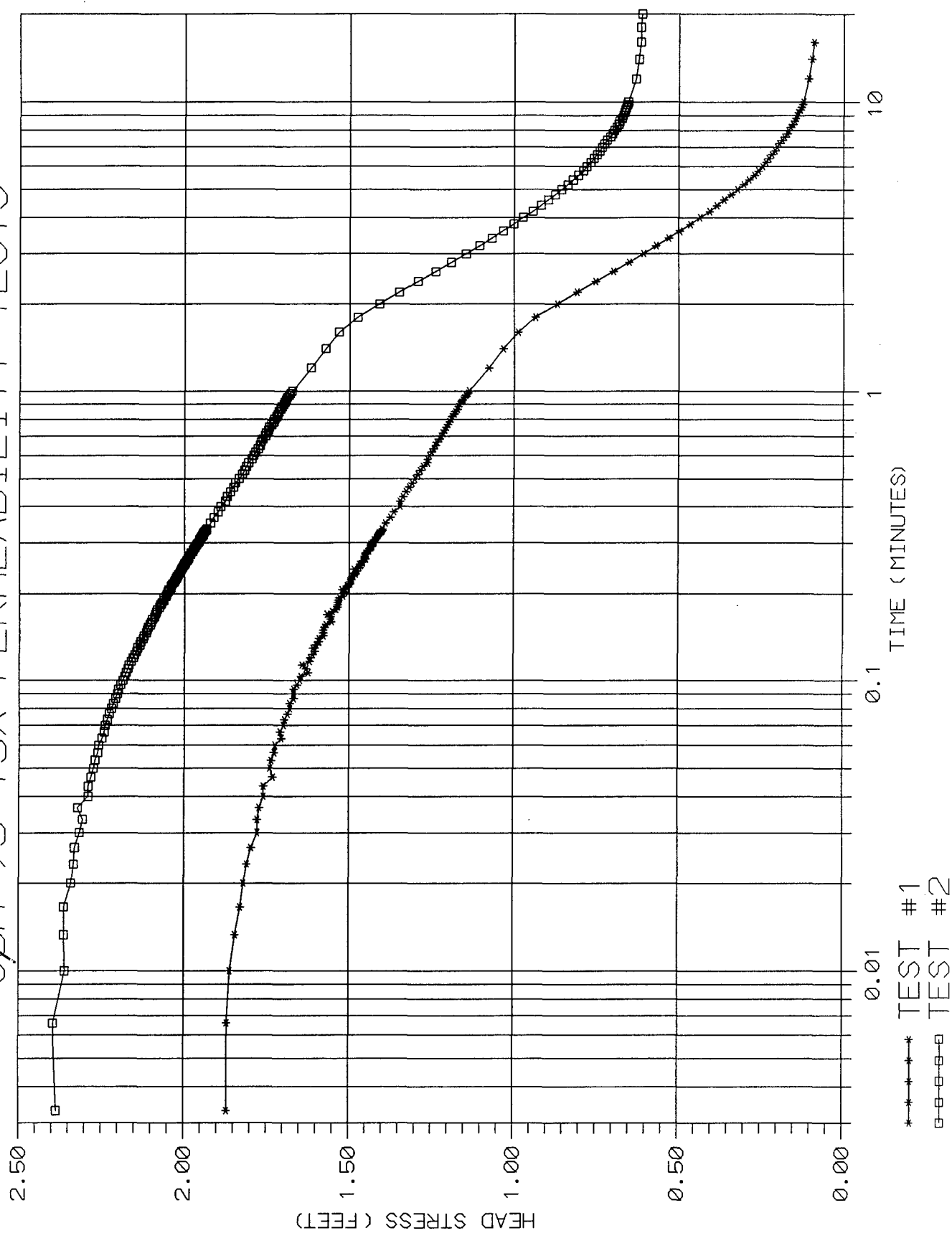
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 13

SETUP	TEST ID <u>φ12φ2</u>	DATE	BY WHOM
MONITORING WELL ID	<u>GGM-93-12X</u>	<u>R. JOHNSON +</u> <u>D. PIERCE</u>	
DATE OF TEST	<u>7-1-93</u>		
TYPE OF TEST	<u>RIISING HEAD #2</u>		
HERMIT TYPE/SERIAL#	<u>SE100DC/1KCO1732</u>		
TEST #	<u>SEL 13 (2 OF 2)</u>		
DATA COLLECTION RATE	<u>LOG 1</u>		
TRANSDUCER			
SERIAL #	<u>PTX-161/2045 DE</u>		
PSIG	<u>10</u>		
SCALE FACTOR	<u>10.003</u>		
OFFSET	<u>-0.034</u>		
INPUT CHANNEL	<u>1</u>		
TEST DATA			
INPUT MODE (TOC/SUR)	<u>TOC</u>		
STATIC WATER LEVEL (FT./TOC)	<u>12.33</u>		
WELL DEPTH (FT./TOC)	<u>20.2</u>		
XD DEPTH (FT./TOC) BELOW <u>φ</u>	<u>6.87</u>		
INITIAL XD REFERENCE	<u>0.00</u>		
SLUG DEPTH (FT./TOC)	<u>12.45</u>		
TIME OF SLUG PLACEMENT	<u>12 08</u>		
TIME OF WL EQUILIBRATION	<u>12 21</u>		
NEW XD REFERENCE	<u>0.06</u>	<u>6.93 - 6.87</u>	
START TIME OF TEST	<u>12 22</u>		
END TIME OF TEST	<u>12 37</u>		
NOTES:			

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

6
GZM-93-13X PERMEABILITY TESTS



Fort Devens - Groups 3&6
G6M-93-13X Test 1
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 3.19E+00 ft/day
1.13E-03 cm/sec

Basic Time Lag: 2.61 m
2.3 Times Basic Time Lag: 5.99 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 2.64E+00 ft/day
9.30E-04 cm/sec

Time Coordinate T1: 1.4 m
Time Coordinate T2: 12.6 m
Head Ratio Coordinate H1: 54.21E-02
Head Ratio Coordinate H2: 15.58E-03

Well/Aquifer Parameters

Length of well screen: 7.10 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

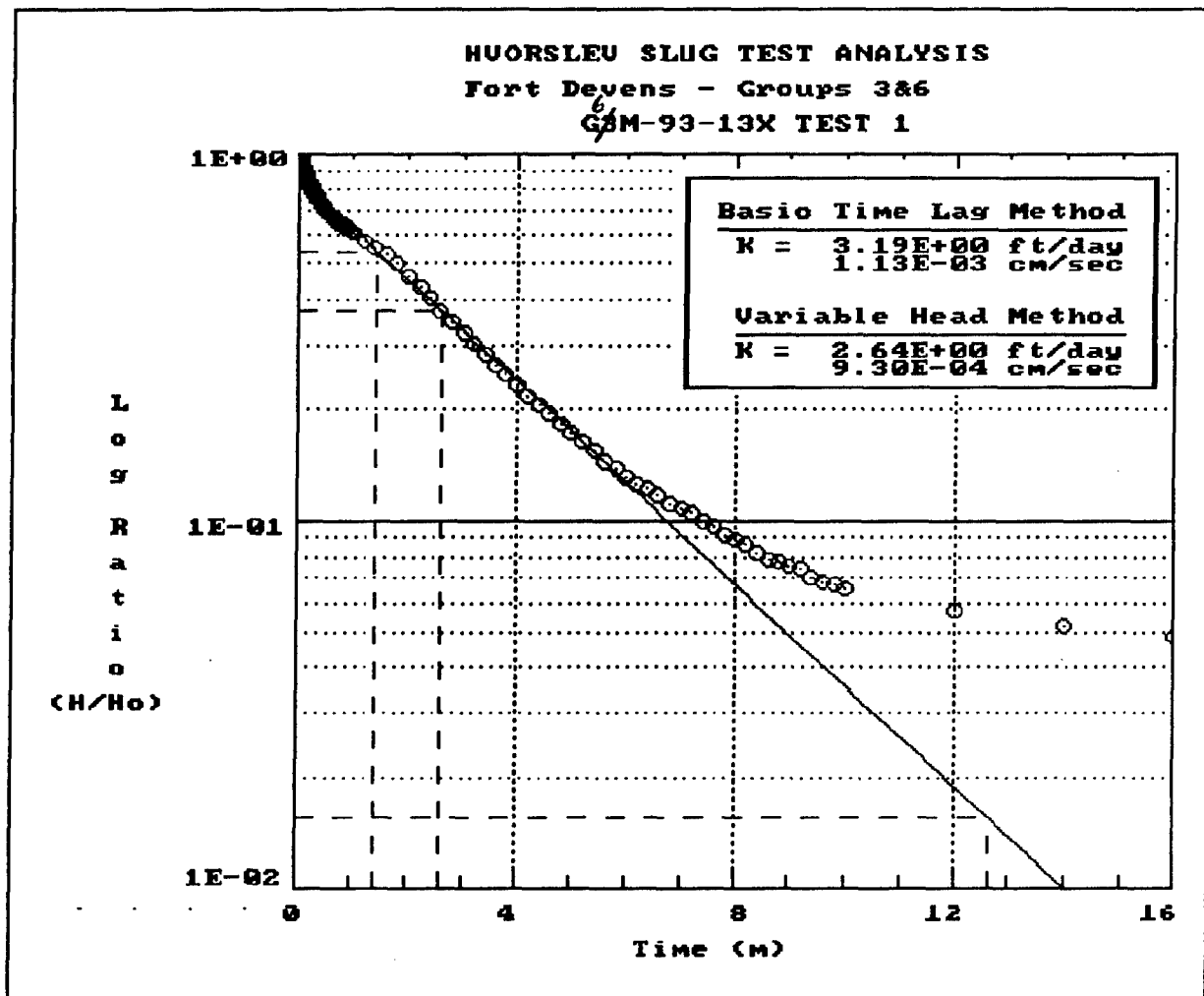
Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0033	1.000	2	0.0066	1.000	3	0.0100	0.995
4	0.0133	0.987	5	0.0166	0.978	6	0.0200	0.973
7	0.0233	0.968	8	0.0266	0.961	9	0.0300	0.951
10	0.0333	0.951	11	0.0366	0.948	12	0.0400	0.941
13	0.0433	0.941	14	0.0466	0.926	15	0.0500	0.930

16	0.0533	0.929	17	0.0566	0.924	18	0.0600	0.922
19	0.0633	0.912	20	0.0666	0.914	21	0.0700	0.909
22	0.0733	0.907	23	0.0766	0.902	24	0.0800	0.898
25	0.0833	0.898	26	0.0866	0.892	27	0.0900	0.892
28	0.0933	0.892	29	0.0966	0.887	30	0.1000	0.882
31	0.1033	0.880	32	0.1066	0.868	33	0.1100	0.872
34	0.1133	0.878	35	0.1166	0.866	36	0.1200	0.865
37	0.1233	0.861	38	0.1266	0.858	39	0.1300	0.861
40	0.1333	0.856	41	0.1366	0.851	42	0.1400	0.851
43	0.1433	0.844	44	0.1466	0.844	45	0.1500	0.844
46	0.1533	0.843	47	0.1566	0.840	48	0.1600	0.831
49	0.1633	0.833	50	0.1666	0.833	51	0.1700	0.838
52	0.1733	0.829	53	0.1766	0.824	54	0.1800	0.821
55	0.1833	0.821	56	0.1866	0.821	57	0.1900	0.819
58	0.1933	0.818	59	0.1966	0.812	60	0.2000	0.812
61	0.2033	0.809	62	0.2066	0.814	63	0.2100	0.806
64	0.2133	0.806	65	0.2166	0.801	66	0.2200	0.801
67	0.2233	0.799	68	0.2266	0.799	69	0.2300	0.797
70	0.2333	0.792	71	0.2366	0.792	72	0.2400	0.789
73	0.2433	0.794	74	0.2466	0.786	75	0.2500	0.784
76	0.2533	0.786	77	0.2566	0.780	78	0.2600	0.780
79	0.2633	0.775	80	0.2666	0.777	81	0.2700	0.777
82	0.2733	0.775	83	0.2766	0.775	84	0.2800	0.770
85	0.2833	0.770	86	0.2866	0.770	87	0.2900	0.765
88	0.2933	0.765	89	0.2966	0.767	90	0.3000	0.761
91	0.3033	0.761	92	0.3066	0.761	93	0.3100	0.758
94	0.3133	0.757	95	0.3166	0.755	96	0.3200	0.755
97	0.3233	0.753	98	0.3266	0.750	99	0.3300	0.748
100	0.3333	0.748	101	0.3500	0.743	102	0.3666	0.735
103	0.3833	0.729	104	0.4000	0.719	105	0.4166	0.719
106	0.4333	0.714	107	0.4500	0.710	108	0.4666	0.704
109	0.4833	0.699	110	0.5000	0.696	111	0.5166	0.691
112	0.5333	0.687	113	0.5500	0.682	114	0.5666	0.675
115	0.5833	0.675	116	0.6000	0.672	117	0.6166	0.669
118	0.6333	0.665	119	0.6500	0.662	120	0.6666	0.660
121	0.6833	0.655	122	0.7000	0.653	123	0.7166	0.650
124	0.7333	0.647	125	0.7500	0.645	126	0.7666	0.642
127	0.7833	0.640	128	0.8000	0.637	129	0.8166	0.635
130	0.8333	0.632	131	0.8500	0.630	132	0.8666	0.627
133	0.8833	0.625	134	0.9000	0.623	135	0.9166	0.620
136	0.9333	0.618	137	0.9500	0.615	138	0.9666	0.613
139	0.9833	0.610	140	1.0000	0.608	141	1.2000	0.576
142	1.4000	0.552	143	1.6000	0.528	144	1.8000	0.500
145	2.0000	0.464	146	2.2000	0.432	147	2.4000	0.402
148	2.6000	0.373	149	2.8000	0.348	150	3.0000	0.324
151	3.2000	0.304	152	3.4000	0.283	153	3.6000	0.265

154	3.8000	0.248	155	4.0000	0.233	156	4.2000	0.218
157	4.4000	0.206	158	4.6000	0.194	159	4.8000	0.182
160	5.0000	0.172	161	5.2000	0.162	162	5.4000	0.153
163	5.6000	0.145	164	5.8000	0.139	165	6.0000	0.132
166	6.2000	0.126	167	6.4000	0.121	168	6.6000	0.117
169	6.8000	0.111	170	7.0000	0.108	171	7.2000	0.104
172	7.4000	0.099	173	7.6000	0.096	174	7.8000	0.091
175	8.0000	0.089	176	8.2000	0.086	177	8.4000	0.082
178	8.6000	0.079	179	8.8000	0.078	180	9.0000	0.076
181	9.2000	0.074	182	9.4000	0.071	183	9.6000	0.069
184	9.8000	0.067	185	10.0000	0.066	186	12.0000	0.057
187	14.0000	0.052	188	16.0000	0.049	189	0.0000	1.000



154	3.8000	0.248	155	4.0000	0.233	156	4.2000	0.218
157	4.4000	0.206	158	4.6000	0.194	159	4.8000	0.182
160	5.0000	0.172	161	5.2000	0.162	162	5.4000	0.153
163	5.6000	0.145	164	5.8000	0.139	165	6.0000	0.132
166	6.2000	0.126	167	6.4000	0.121	168	6.6000	0.117
169	6.8000	0.111	170	7.0000	0.108	171	7.2000	0.104
172	7.4000	0.099	173	7.6000	0.096	174	7.8000	0.091
175	8.0000	0.089	176	8.2000	0.086	177	8.4000	0.082
178	8.6000	0.079	179	8.8000	0.078	180	9.0000	0.076
181	9.2000	0.074	182	9.4000	0.071	183	9.6000	0.069
184	9.8000	0.067	185	10.0000	0.066	186	12.0000	0.057
187	14.0000	0.052	188	16.0000	0.049	189	0.0000	1.000

Fort Devens - Groups 3&6
G6M-93-13X TEST 2
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 1.88E+00 ft/day
6.63E-04 cm/sec

Basic Time Lag: 4.43 m

2.3 Times Basic Time Lag: 10.19 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 1.55E+00 ft/day
5.46E-04 cm/sec

Time Coordinate T1: 1.1 m

Time Coordinate T2: 10.3 m

Head Ratio Coordinate H1: 68.10E-02

Head Ratio Coordinate H2: 12.38E-02

Well/Aquifer Parameters

Length of well screen: 7.10 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0033	0.996	2	0.0066	1.000	3	0.0100	0.985
4	0.0133	0.987	5	0.0166	0.987	6	0.0200	0.977
7	0.0233	0.975	8	0.0266	0.973	9	0.0300	0.967
10	0.0333	0.963	11	0.0366	0.970	12	0.0400	0.956
13	0.0433	0.956	14	0.0466	0.952	15	0.0500	0.949

16	0.0533	0.948	17	0.0566	0.944	18	0.0600	0.943
19	0.0633	0.939	20	0.0666	0.937	21	0.0700	0.935
22	0.0733	0.932	23	0.0766	0.930	24	0.0800	0.927
25	0.0833	0.924	26	0.0866	0.922	27	0.0900	0.919
28	0.0933	0.918	29	0.0966	0.915	30	0.1000	0.913
31	0.1033	0.910	32	0.1066	0.909	33	0.1100	0.906
34	0.1133	0.905	35	0.1166	0.902	36	0.1200	0.899
37	0.1233	0.898	38	0.1266	0.896	39	0.1300	0.894
40	0.1333	0.891	41	0.1366	0.890	42	0.1400	0.888
43	0.1433	0.886	44	0.1466	0.884	45	0.1500	0.882
46	0.1533	0.881	47	0.1566	0.878	48	0.1600	0.877
49	0.1633	0.876	50	0.1666	0.873	51	0.1700	0.872
52	0.1733	0.871	53	0.1766	0.869	54	0.1800	0.866
55	0.1833	0.865	56	0.1866	0.864	57	0.1900	0.861
58	0.1933	0.861	59	0.1966	0.858	60	0.2000	0.857
61	0.2033	0.856	62	0.2066	0.855	63	0.2100	0.852
64	0.2133	0.852	65	0.2166	0.851	66	0.2200	0.848
67	0.2233	0.847	68	0.2266	0.846	69	0.2300	0.844
70	0.2333	0.843	71	0.2366	0.841	72	0.2400	0.840
73	0.2433	0.839	74	0.2466	0.838	75	0.2500	0.836
76	0.2533	0.835	77	0.2566	0.833	78	0.2600	0.832
79	0.2633	0.831	80	0.2666	0.830	81	0.2700	0.830
82	0.2733	0.827	83	0.2766	0.827	84	0.2800	0.824
85	0.2833	0.824	86	0.2866	0.823	87	0.2900	0.822
88	0.2933	0.820	89	0.2966	0.819	90	0.3000	0.818
91	0.3033	0.816	92	0.3066	0.816	93	0.3100	0.815
94	0.3133	0.814	95	0.3166	0.813	96	0.3200	0.811
97	0.3233	0.811	98	0.3266	0.810	99	0.3300	0.808
100	0.3333	0.807	101	0.3500	0.802	102	0.3666	0.798
103	0.3833	0.792	104	0.4000	0.789	105	0.4166	0.783
106	0.4333	0.781	107	0.4500	0.777	108	0.4666	0.773
109	0.4833	0.770	110	0.5000	0.766	111	0.5166	0.762
112	0.5333	0.759	113	0.5500	0.757	114	0.5666	0.754
115	0.5833	0.750	116	0.6000	0.748	117	0.6166	0.745
118	0.6333	0.742	119	0.6500	0.740	120	0.6666	0.739
121	0.6833	0.736	122	0.7000	0.733	123	0.7166	0.732
124	0.7333	0.729	125	0.7500	0.728	126	0.7666	0.725
127	0.7833	0.723	128	0.8000	0.722	129	0.8166	0.719
130	0.8333	0.717	131	0.8500	0.716	132	0.8666	0.714
133	0.8833	0.712	134	0.9000	0.709	135	0.9166	0.708
136	0.9333	0.707	137	0.9500	0.706	138	0.9666	0.703
139	0.9833	0.701	140	1.0000	0.699	141	1.2000	0.675
142	1.4000	0.657	143	1.6000	0.640	144	1.8000	0.616
145	2.0000	0.588	146	2.2000	0.563	147	2.4000	0.539
148	2.6000	0.517	149	2.8000	0.497	150	3.0000	0.478
151	3.2000	0.461	152	3.4000	0.446	153	3.6000	0.431

154	3.8000	0.418	155	4.0000	0.406	156	4.2000	0.394
157	4.4000	0.384	158	4.6000	0.375	159	4.8000	0.365
160	5.0000	0.357	161	5.2000	0.349	162	5.4000	0.343
163	5.6000	0.336	164	5.8000	0.329	165	6.0000	0.326
166	6.2000	0.320	167	6.4000	0.316	168	6.6000	0.312
169	6.8000	0.309	170	7.0000	0.306	171	7.2000	0.303
172	7.4000	0.299	173	7.6000	0.295	174	7.8000	0.293
175	8.0000	0.290	176	8.2000	0.287	177	8.4000	0.285
178	8.6000	0.284	179	8.8000	0.281	180	9.0000	0.279
181	9.2000	0.278	182	9.4000	0.277	183	9.6000	0.276
184	9.8000	0.274	185	10.0000	0.273	186	12.0000	0.263
187	14.0000	0.260	188	16.0000	0.257	189	18.0000	0.257
190	20.0000	0.256						

Fort Devens - Groups 3&6
G6M-93-13X TEST 1
Russell Johnson

Results

Hydraulic Conductivity: 1.92E+00 ft/day
6.76E-04 cm/sec
Y-Intercept (Y₀): 1.63E+00 ft
Well Screen Ratio (L_e/r_w): 17.1
Dimensionless Parameter A: 2.09
Dimensionless Parameter B: 0.32
Slope of Line [ln(Y₀/Y_t)/t]: 3.280E-01 1/min
Well Parameters (R_c² / 2*L_e): 2.035E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 1.994

Well/Aquifer Parameters

Depth of well: 20.70 ft
Length of well screen: 7.10 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.870	2	0.0066	1.870	3	0.0100	1.861
4	0.0133	1.845	5	0.0166	1.829	6	0.0200	1.819
7	0.0233	1.810	8	0.0266	1.797	9	0.0300	1.778
10	0.0333	1.778	11	0.0366	1.772	12	0.0400	1.759
13	0.0433	1.759	14	0.0466	1.731	15	0.0500	1.740
16	0.0533	1.737	17	0.0566	1.728	18	0.0600	1.725
19	0.0633	1.706	20	0.0666	1.709	21	0.0700	1.699
22	0.0733	1.696	23	0.0766	1.687	24	0.0800	1.680

25	0.0833	1.680	26	0.0866	1.668	27	0.0900	1.668
28	0.0933	1.668	29	0.0966	1.658	30	0.1000	1.649
31	0.1033	1.646	32	0.1066	1.624	33	0.1100	1.630
34	0.1133	1.642	35	0.1166	1.620	36	0.1200	1.617
37	0.1233	1.611	38	0.1266	1.605	39	0.1300	1.611
40	0.1333	1.601	41	0.1366	1.592	42	0.1400	1.592
43	0.1433	1.579	44	0.1466	1.579	45	0.1500	1.579
46	0.1533	1.576	47	0.1566	1.570	48	0.1600	1.554
49	0.1633	1.557	50	0.1666	1.557	51	0.1700	1.567
52	0.1733	1.551	53	0.1766	1.541	54	0.1800	1.535
55	0.1833	1.535	56	0.1866	1.535	57	0.1900	1.532
58	0.1933	1.529	59	0.1966	1.519	60	0.2000	1.519
61	0.2033	1.513	62	0.2066	1.522	63	0.2100	1.507
64	0.2133	1.507	65	0.2166	1.497	66	0.2200	1.497
67	0.2233	1.494	68	0.2266	1.494	69	0.2300	1.491
70	0.2333	1.481	71	0.2366	1.481	72	0.2400	1.475
73	0.2433	1.485	74	0.2466	1.469	75	0.2500	1.466
76	0.2533	1.469	77	0.2566	1.459	78	0.2600	1.459
79	0.2633	1.450	80	0.2666	1.453	81	0.2700	1.453
82	0.2733	1.450	83	0.2766	1.450	84	0.2800	1.440
85	0.2833	1.440	86	0.2866	1.440	87	0.2900	1.431
88	0.2933	1.431	89	0.2966	1.434	90	0.3000	1.424
91	0.3033	1.424	92	0.3066	1.424	93	0.3100	1.418
94	0.3133	1.415	95	0.3166	1.412	96	0.3200	1.412
97	0.3233	1.409	98	0.3266	1.402	99	0.3300	1.399
100	0.3333	1.399	101	0.3500	1.390	102	0.3666	1.374
103	0.3833	1.364	104	0.4000	1.345	105	0.4166	1.345
106	0.4333	1.336	107	0.4500	1.327	108	0.4666	1.317
109	0.4833	1.308	110	0.5000	1.301	111	0.5166	1.292
112	0.5333	1.285	113	0.5500	1.276	114	0.5666	1.263
115	0.5833	1.263	116	0.6000	1.257	117	0.6166	1.251
118	0.6333	1.244	119	0.6500	1.238	120	0.6666	1.235
121	0.6833	1.225	122	0.7000	1.222	123	0.7166	1.216
124	0.7333	1.210	125	0.7500	1.206	126	0.7666	1.200
127	0.7833	1.197	128	0.8000	1.191	129	0.8166	1.188
130	0.8333	1.181	131	0.8500	1.178	132	0.8666	1.172
133	0.8833	1.169	134	0.9000	1.165	135	0.9166	1.159
136	0.9333	1.156	137	0.9500	1.150	138	0.9666	1.146
139	0.9833	1.140	140	1.0000	1.137	141	1.2000	1.077
142	1.4000	1.033	143	1.6000	0.988	144	1.8000	0.935
145	2.0000	0.868	146	2.2000	0.808	147	2.4000	0.752
148	2.6000	0.698	149	2.8000	0.650	150	3.0000	0.606
151	3.2000	0.568	152	3.4000	0.530	153	3.6000	0.496
154	3.8000	0.464	155	4.0000	0.436	156	4.2000	0.407
157	4.4000	0.385	158	4.6000	0.363	159	4.8000	0.341
160	5.0000	0.322	161	5.2000	0.303	162	5.4000	0.287

163	5.6000	0.271	164	5.8000	0.259	165	6.0000	0.246
166	6.2000	0.236	167	6.4000	0.227	168	6.6000	0.218
169	6.8000	0.208	170	7.0000	0.202	171	7.2000	0.195
172	7.4000	0.186	173	7.6000	0.180	174	7.8000	0.170
175	8.0000	0.167	176	8.2000	0.161	177	8.4000	0.154
178	8.6000	0.148	179	8.8000	0.145	180	9.0000	0.142
181	9.2000	0.139	182	9.4000	0.132	183	9.6000	0.129
184	9.8000	0.126	185	10.0000	0.123	186	12.0000	0.107
187	14.0000	0.097	188	16.0000	0.091	189	0.0000	1.000

Fort Devens - Groups 3&6
G6M-93-13X TEST 2
Russell Johnson

Results

Hydraulic Conductivity: 1.09E+00 ft/day
3.83E-04 cm/sec
Y-Intercept (Yo): 2.02E+00 ft
Well Screen Ratio (Le/rw): 17.1
Dimensionless Parameter A: 2.09
Dimensionless Parameter B: 0.32
Slope of Line $[\ln(Y_o/Y_t)/t]$: 1.858E-01 1/min
Well Parameters $(Rc^2 / 2 * Le)$: 2.035E-03 ft
Dimensionless Ratio $[\ln(Re/rw)]$: 1.994

Well/Aquifer Parameters

Depth of well: 20.70 ft
Length of well screen: 7.10 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	2.385	2	0.0066	2.395	3	0.0100	2.360
4	0.0133	2.363	5	0.0166	2.363	6	0.0200	2.341
7	0.0233	2.334	8	0.0266	2.331	9	0.0300	2.316
10	0.0333	2.306	11	0.0366	2.322	12	0.0400	2.290
13	0.0433	2.290	14	0.0466	2.281	15	0.0500	2.274
16	0.0533	2.271	17	0.0566	2.262	18	0.0600	2.259
19	0.0633	2.249	20	0.0666	2.243	21	0.0700	2.240
22	0.0733	2.233	23	0.0766	2.227	24	0.0800	2.221

25	0.0833	2.214	26	0.0866	2.208	27	0.0900	2.202
28	0.0933	2.199	29	0.0966	2.192	30	0.1000	2.186
31	0.1033	2.180	32	0.1066	2.176	33	0.1100	2.170
34	0.1133	2.167	35	0.1166	2.161	36	0.1200	2.154
37	0.1233	2.151	38	0.1266	2.145	39	0.1300	2.142
40	0.1333	2.135	41	0.1366	2.132	42	0.1400	2.126
43	0.1433	2.123	44	0.1466	2.116	45	0.1500	2.113
46	0.1533	2.110	47	0.1566	2.104	48	0.1600	2.101
49	0.1633	2.097	50	0.1666	2.091	51	0.1700	2.088
52	0.1733	2.085	53	0.1766	2.082	54	0.1800	2.075
55	0.1833	2.072	56	0.1866	2.069	57	0.1900	2.063
58	0.1933	2.063	59	0.1966	2.056	60	0.2000	2.053
61	0.2033	2.050	62	0.2066	2.047	63	0.2100	2.041
64	0.2133	2.041	65	0.2166	2.037	66	0.2200	2.031
67	0.2233	2.028	68	0.2266	2.025	69	0.2300	2.022
70	0.2333	2.019	71	0.2366	2.015	72	0.2400	2.012
73	0.2433	2.009	74	0.2466	2.006	75	0.2500	2.003
76	0.2533	2.000	77	0.2566	1.996	78	0.2600	1.993
79	0.2633	1.990	80	0.2666	1.987	81	0.2700	1.987
82	0.2733	1.981	83	0.2766	1.981	84	0.2800	1.974
85	0.2833	1.974	86	0.2866	1.971	87	0.2900	1.968
88	0.2933	1.965	89	0.2966	1.962	90	0.3000	1.958
91	0.3033	1.955	92	0.3066	1.955	93	0.3100	1.952
94	0.3133	1.949	95	0.3166	1.946	96	0.3200	1.943
97	0.3233	1.943	98	0.3266	1.940	99	0.3300	1.936
100	0.3333	1.933	101	0.3500	1.921	102	0.3666	1.911
103	0.3833	1.898	104	0.4000	1.889	105	0.4166	1.876
106	0.4333	1.870	107	0.4500	1.861	108	0.4666	1.851
109	0.4833	1.845	110	0.5000	1.835	111	0.5166	1.826
112	0.5333	1.819	113	0.5500	1.813	114	0.5666	1.807
115	0.5833	1.797	116	0.6000	1.791	117	0.6166	1.785
118	0.6333	1.778	119	0.6500	1.772	120	0.6666	1.769
121	0.6833	1.763	122	0.7000	1.756	123	0.7166	1.753
124	0.7333	1.747	125	0.7500	1.744	126	0.7666	1.737
127	0.7833	1.731	128	0.8000	1.728	129	0.8166	1.722
130	0.8333	1.718	131	0.8500	1.715	132	0.8666	1.709
133	0.8833	1.706	134	0.9000	1.699	135	0.9166	1.696
136	0.9333	1.693	137	0.9500	1.690	138	0.9666	1.684
139	0.9833	1.680	140	1.0000	1.674	141	1.2000	1.617
142	1.4000	1.573	143	1.6000	1.532	144	1.8000	1.475
145	2.0000	1.409	146	2.2000	1.349	147	2.4000	1.292
148	2.6000	1.238	149	2.8000	1.191	150	3.0000	1.146
151	3.2000	1.105	152	3.4000	1.067	153	3.6000	1.033
154	3.8000	1.001	155	4.0000	0.973	156	4.2000	0.944
157	4.4000	0.919	158	4.6000	0.897	159	4.8000	0.875
160	5.0000	0.856	161	5.2000	0.837	162	5.4000	0.821

163	5.6000	0.805	164	5.8000	0.789	165	6.0000	0.780
166	6.2000	0.767	167	6.4000	0.758	168	6.6000	0.748
169	6.8000	0.739	170	7.0000	0.733	171	7.2000	0.726
172	7.4000	0.717	173	7.6000	0.707	174	7.8000	0.701
175	8.0000	0.695	176	8.2000	0.688	177	8.4000	0.682
178	8.6000	0.679	179	8.8000	0.672	180	9.0000	0.669
181	9.2000	0.666	182	9.4000	0.663	183	9.6000	0.660
184	9.8000	0.657	185	10.0000	0.654	186	12.0000	0.631
187	14.0000	0.622	188	16.0000	0.616	189	18.0000	0.616
190	20.0000	0.612						

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 8

SETUP	TEST ID	DATE	BY WHOM
$\phi 13 \phi 1$		6 APR	R. JOHNSON + D. PIERCE
MONITORING WELL ID		G3M-93-13X	
DATE OF TEST		7-1-93	
TYPE OF TEST		RISING HEAD #1	
HERMIT TYPE/SERIAL#		SE1000C/62491K001732	
TEST #		SEL 8 / (1 OF 2)	
DATA COLLECTION RATE		LOG 1	
TRANSDUCER			
SERIAL #		PTX-161/2045DE	
PSIG		10	
SCALE FACTOR		9.987	
OFFSET		-0.036	
INPUT CHANNEL		1	
TEST DATA			
INPUT MODE (TOC/SUR)		TOC	
STATIC WATER LEVEL (FT./TOC)		13.56	
WELL DEPTH (FT./TOC)		20.7	
XD DEPTH (FT. TOE) BELOW ∇		6.82	
INITIAL XD REFERENCE		0.00	
SLUG DEPTH (FT./TOC)		13.45	
TIME OF SLUG PLACEMENT		849	
TIME OF WL EQUILIBRATION		901	
NEW XD REFERENCE		0.04	6.86 - 6.82
START TIME OF TEST		902	
END TIME OF TEST		919	
NOTES:	RESIDUAL HEAD		

0.09

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

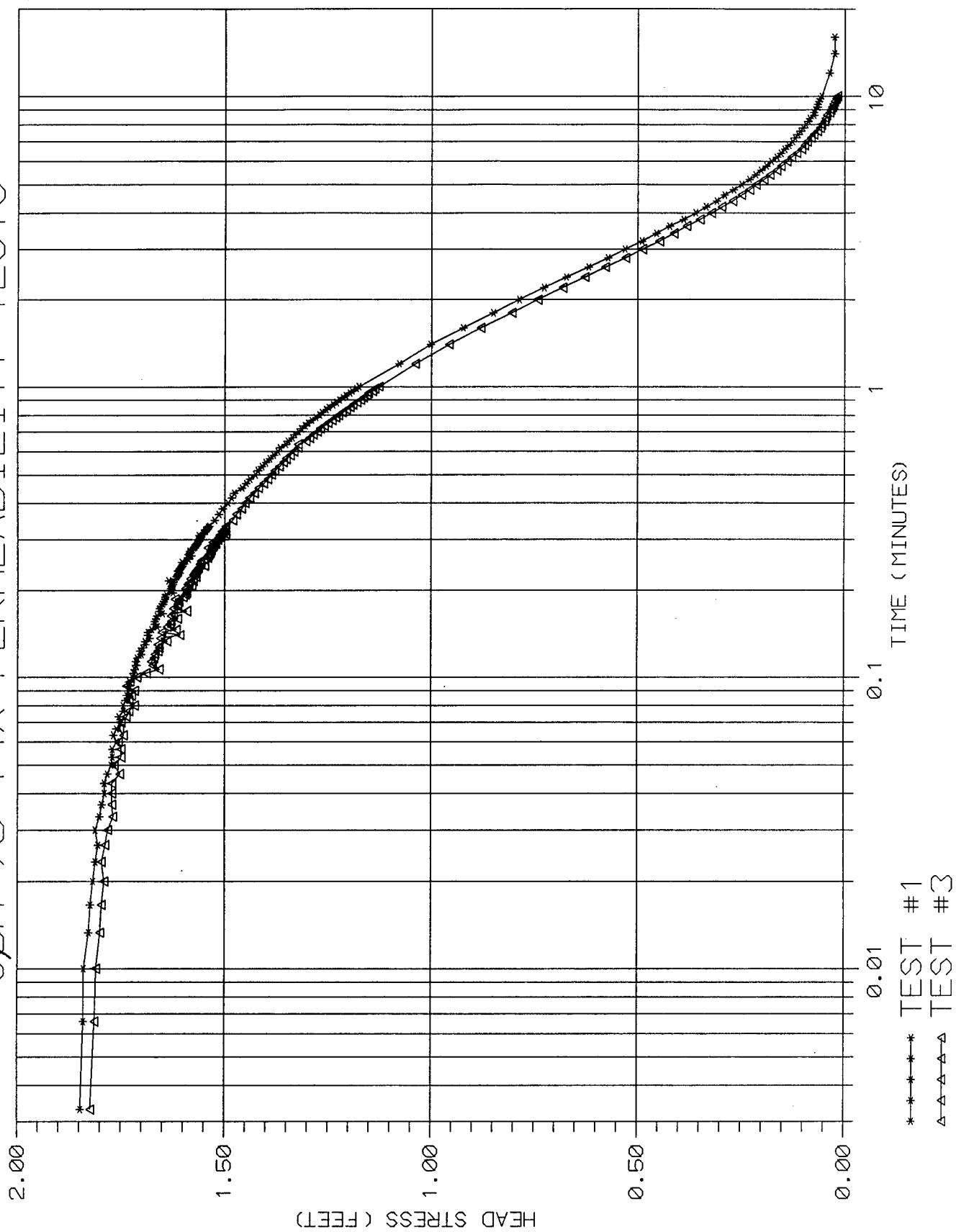
AQUIFER TEST NO. SEL 9

SETUP	TEST ID <u>φ13φ2</u>	DATE <u>6 MAY</u>	BY WHOM
MONITORING WELL ID	<u>67M-93-13X</u>	<u>R. JOHNSON +</u>	<u>D. PIERCE</u>
DATE OF TEST	<u>7-1-93</u>		
TYPE OF TEST	<u>RISING HEAD #2</u>		
HERMIT TYPE/SERIAL#	<u>SE1009C/1KC01732</u>		
TEST #	<u>SEL 9 (20F2)</u>		
DATA COLLECTION RATE	<u>LOG 1</u>		
TRANSDUCER			
SERIAL #	<u>PTX-161/20450E</u>		
PSIG	<u>10</u>		
SCALE FACTOR	<u>9.987</u>		
OFFSET	<u>-0.036</u>		
INPUT CHANNEL	<u>1</u>		
TEST DATA			
INPUT MODE (TOC/SUR)	<u>TOC</u>		
STATIC WATER LEVEL (FT./TOC)	<u>13.56</u>		
WELL DEPTH (FT./TOC)	<u>20.7</u>		
XD DEPTH (FT./TOC) BELOW <u>?</u>	<u>6.92</u>		
INITIAL XD REFERENCE	<u>0.00</u>		
SLUG DEPTH (FT./TOC)	<u>13.49</u>		
TIME OF SLUG PLACEMENT	<u>9:20</u>		
TIME OF WL EQUILIBRATION	<u>9:34</u>		
NEW XD REFERENCE	<u>0.01</u>	<u>6.93 - 6.92</u>	
START TIME OF TEST	<u>9:56</u> <u>POF</u>	<u>9:35</u>	
END TIME OF TEST	<u>9:56</u>		
NOTES:	<u>0.61 residual</u>		

head for 10 mins.
will check transducer
and maybe try second
one at next well.

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

6 GZM-93-14X PERMEABILITY TESTS



Fort Devens - Groups 3&6
G6M-93-14X Test 1
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 3.07E+00 ft/day
1.08E-03 cm/sec

Basic Time Lag: 2.41 m

2.3 Times Basic Time Lag: 5.54 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 2.82E+00 ft/day
9.94E-04 cm/sec

Time Coordinate T1: 1.2 m

Time Coordinate T2: 10.7 m

Head Ratio Coordinate H1: 58.92E-02

Head Ratio Coordinate H2: 15.73E-03

Well/Aquifer Parameters

Length of well screen: 8.50 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

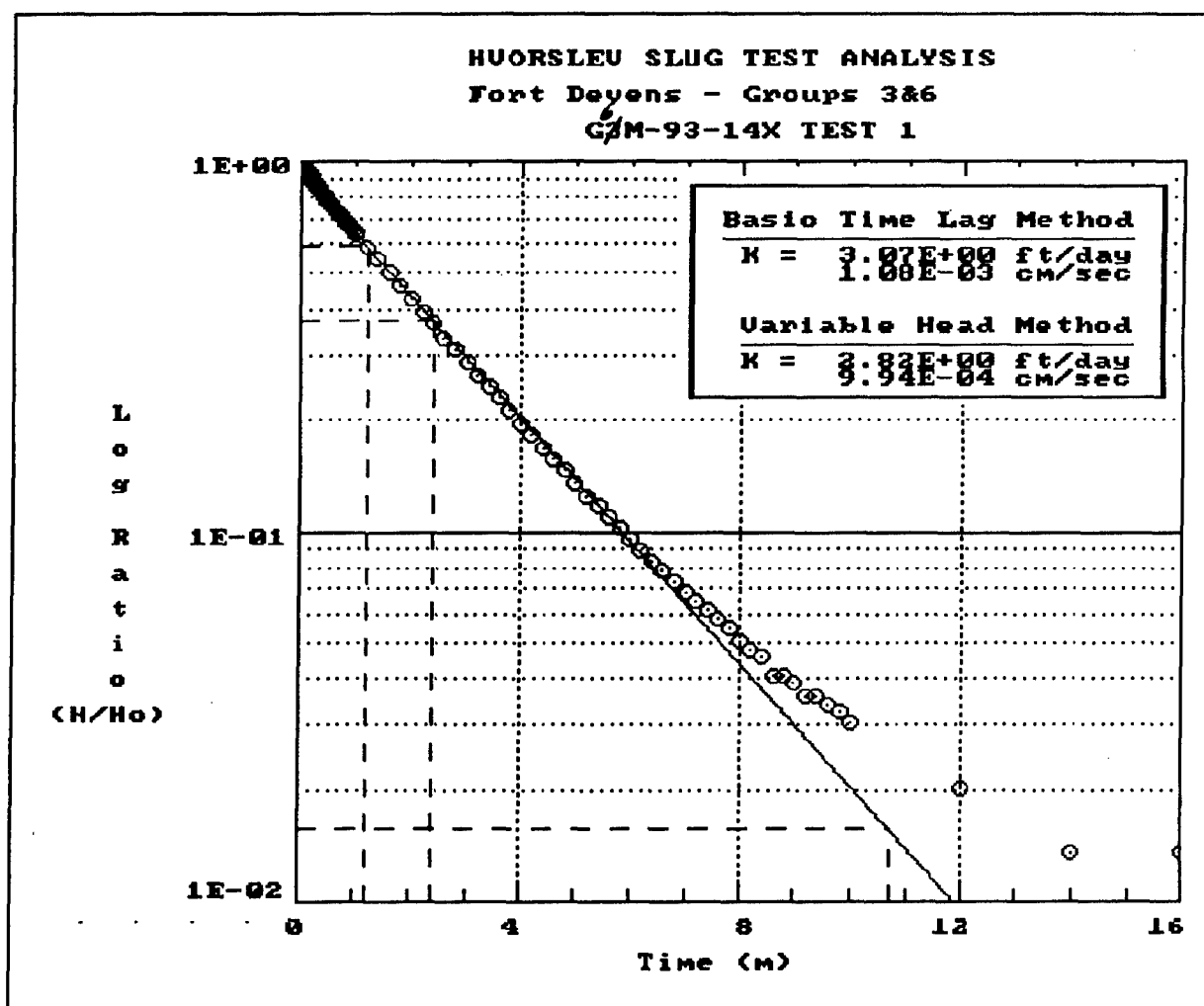
Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
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1	0.0033	1.000	2	0.0066	0.996	3	0.0100	0.996
4	0.0133	0.990	5	0.0166	0.988	6	0.0200	0.984
7	0.0233	0.981	8	0.0266	0.977	9	0.0300	0.981
10	0.0333	0.976	11	0.0366	0.972	12	0.0400	0.969
13	0.0433	0.969	14	0.0466	0.965	15	0.0500	0.960

16	0.0533	0.959	17	0.0566	0.959	18	0.0600	0.953
19	0.0633	0.957	20	0.0666	0.953	21	0.0700	0.949
22	0.0733	0.950	23	0.0766	0.945	24	0.0800	0.945
25	0.0833	0.942	26	0.0866	0.940	27	0.0900	0.938
28	0.0933	0.937	29	0.0966	0.937	30	0.1000	0.933
31	0.1033	0.931	32	0.1066	0.930	33	0.1100	0.928
34	0.1133	0.928	35	0.1166	0.926	36	0.1200	0.921
37	0.1233	0.923	38	0.1266	0.919	39	0.1300	0.916
40	0.1333	0.916	41	0.1366	0.911	42	0.1400	0.912
43	0.1433	0.912	44	0.1466	0.907	45	0.1500	0.900
46	0.1533	0.904	47	0.1566	0.904	48	0.1600	0.902
49	0.1633	0.900	50	0.1666	0.893	51	0.1700	0.897
52	0.1733	0.897	53	0.1766	0.896	54	0.1800	0.893
55	0.1833	0.892	56	0.1866	0.890	57	0.1900	0.890
58	0.1933	0.888	59	0.1966	0.880	60	0.2000	0.883
61	0.2033	0.883	62	0.2066	0.881	63	0.2100	0.880
64	0.2133	0.880	65	0.2166	0.885	66	0.2200	0.877
67	0.2233	0.875	68	0.2266	0.873	69	0.2300	0.871
70	0.2333	0.873	71	0.2366	0.871	72	0.2400	0.870
73	0.2433	0.868	74	0.2466	0.866	75	0.2500	0.868
76	0.2533	0.863	77	0.2566	0.859	78	0.2600	0.861
79	0.2633	0.856	80	0.2666	0.859	81	0.2700	0.858
82	0.2733	0.858	83	0.2766	0.854	84	0.2800	0.853
85	0.2833	0.851	86	0.2866	0.849	87	0.2900	0.849
88	0.2933	0.847	89	0.2966	0.846	90	0.3000	0.846
91	0.3033	0.844	92	0.3066	0.844	93	0.3100	0.846
94	0.3133	0.840	95	0.3166	0.840	96	0.3200	0.837
97	0.3233	0.837	98	0.3266	0.835	99	0.3300	0.834
100	0.3333	0.832	101	0.3500	0.825	102	0.3666	0.820
103	0.3833	0.815	104	0.4000	0.808	105	0.4166	0.803
106	0.4333	0.800	107	0.4500	0.789	108	0.4666	0.784
109	0.4833	0.779	110	0.5000	0.772	111	0.5166	0.769
112	0.5333	0.763	113	0.5500	0.759	114	0.5666	0.753
115	0.5833	0.748	116	0.6000	0.743	117	0.6166	0.740
118	0.6333	0.733	119	0.6500	0.729	120	0.6666	0.724
121	0.6833	0.721	122	0.7000	0.716	123	0.7166	0.712
124	0.7333	0.707	125	0.7500	0.703	126	0.7666	0.698
127	0.7833	0.693	128	0.8000	0.688	129	0.8166	0.685
130	0.8333	0.679	131	0.8500	0.676	132	0.8666	0.671
133	0.8833	0.666	134	0.9000	0.662	135	0.9166	0.657
136	0.9333	0.654	137	0.9500	0.649	138	0.9666	0.645
139	0.9833	0.640	140	1.0000	0.637	141	1.2000	0.584
142	1.4000	0.543	143	1.6000	0.500	144	1.8000	0.460
145	2.0000	0.426	146	2.2000	0.394	147	2.4000	0.364
148	2.6000	0.335	149	2.8000	0.310	150	3.0000	0.287
151	3.2000	0.265	152	3.4000	0.246	153	3.6000	0.229

154	3.8000	0.211	155	4.0000	0.195	156	4.2000	0.181
157	4.4000	0.167	158	4.6000	0.157	159	4.8000	0.145
160	5.0000	0.135	161	5.2000	0.125	162	5.4000	0.116
163	5.6000	0.109	164	5.8000	0.102	165	6.0000	0.096
166	6.2000	0.089	167	6.4000	0.083	168	6.6000	0.079
169	6.8000	0.073	170	7.0000	0.068	171	7.2000	0.065
172	7.4000	0.061	173	7.6000	0.058	174	7.8000	0.055
175	8.0000	0.051	176	8.2000	0.048	177	8.4000	0.046
178	8.6000	0.041	179	8.8000	0.041	180	9.0000	0.039
181	9.2000	0.036	182	9.4000	0.036	183	9.6000	0.034
184	9.8000	0.032	185	10.0000	0.030	186	12.0000	0.020
187	14.0000	0.014	188	16.0000	0.014	189	0.0000	1.000



154	3.8000	0.211	155	4.0000	0.195	156	4.2000	0.181
157	4.4000	0.167	158	4.6000	0.157	159	4.8000	0.145
160	5.0000	0.135	161	5.2000	0.125	162	5.4000	0.116
163	5.6000	0.109	164	5.8000	0.102	165	6.0000	0.096
166	6.2000	0.089	167	6.4000	0.083	168	6.6000	0.079
169	6.8000	0.073	170	7.0000	0.068	171	7.2000	0.065
172	7.4000	0.061	173	7.6000	0.058	174	7.8000	0.055
175	8.0000	0.051	176	8.2000	0.048	177	8.4000	0.046
178	8.6000	0.041	179	8.8000	0.041	180	9.0000	0.039
181	9.2000	0.036	182	9.4000	0.036	183	9.6000	0.034
184	9.8000	0.032	185	10.0000	0.030	186	12.0000	0.020
187	14.0000	0.014	188	16.0000	0.014	189	0.0000	1.000

HVORSLEV INTERACTIVE SLUG TEST ANALYSIS

11-09-1993

Fort Devens - Groups 3&6
G6M-93-14X TEST 3
Russell Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 3.35E+00 ft/day
1.18E-03 cm/sec

Basic Time Lag: 2.21 m

2.3 Times Basic Time Lag: 5.08 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 3.20E+00 ft/day
1.13E-03 cm/sec

Time Coordinate T1: 1.0 m

Time Coordinate T2: 9.0 m

Head Ratio Coordinate H1: 62.44E-02

Head Ratio Coordinate H2: 19.50E-03

Well/Aquifer Parameters

Length of well screen: 8.50 ft
Diameter of the well casing: 0.340 ft
Diameter of the well bore: 0.830 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
-----	-------------	----------------	-----	-------------	----------------	-----	-------------	----------------

1	0.0033	1.000	2	0.0066	0.995	3	0.0100	0.993
4	0.0133	0.988	5	0.0166	0.986	6	0.0200	0.982
7	0.0233	0.986	8	0.0266	0.981	9	0.0300	0.978
10	0.0333	0.970	11	0.0366	0.972	12	0.0400	0.972
13	0.0433	0.972	14	0.0466	0.962	15	0.0500	0.969

16	0.0533	0.960	17	0.0566	0.960	18	0.0600	0.963
19	0.0633	0.957	20	0.0666	0.962	21	0.0700	0.960
22	0.0733	0.953	23	0.0766	0.950	24	0.0800	0.942
25	0.0833	0.950	26	0.0866	0.946	27	0.0900	0.942
28	0.0933	0.953	29	0.0966	0.948	30	0.1000	0.939
31	0.1033	0.927	32	0.1066	0.909	33	0.1100	0.918
34	0.1133	0.920	35	0.1166	0.917	36	0.1200	0.915
37	0.1233	0.911	38	0.1266	0.909	39	0.1300	0.911
40	0.1333	0.899	41	0.1366	0.908	42	0.1400	0.882
43	0.1433	0.906	44	0.1466	0.887	45	0.1500	0.899
46	0.1533	0.896	47	0.1566	0.894	48	0.1600	0.885
49	0.1633	0.894	50	0.1666	0.891	51	0.1700	0.873
52	0.1733	0.891	53	0.1766	0.885	54	0.1800	0.885
55	0.1833	0.884	56	0.1866	0.889	57	0.1900	0.878
58	0.1933	0.875	59	0.1966	0.873	60	0.2000	0.873
61	0.2033	0.875	62	0.2066	0.866	63	0.2100	0.872
64	0.2133	0.870	65	0.2166	0.865	66	0.2200	0.868
67	0.2233	0.861	68	0.2266	0.865	69	0.2300	0.863
70	0.2333	0.861	71	0.2366	0.860	72	0.2400	0.858
73	0.2433	0.849	74	0.2466	0.856	75	0.2500	0.854
76	0.2533	0.854	77	0.2566	0.851	78	0.2600	0.845
79	0.2633	0.845	80	0.2666	0.844	81	0.2700	0.842
82	0.2733	0.842	83	0.2766	0.840	84	0.2800	0.845
85	0.2833	0.839	86	0.2866	0.837	87	0.2900	0.835
88	0.2933	0.839	89	0.2966	0.835	90	0.3000	0.832
91	0.3033	0.832	92	0.3066	0.830	93	0.3100	0.830
94	0.3133	0.821	95	0.3166	0.825	96	0.3200	0.827
97	0.3233	0.823	98	0.3266	0.823	99	0.3300	0.821
100	0.3333	0.821	101	0.3500	0.812	102	0.3666	0.807
103	0.3833	0.800	104	0.4000	0.795	105	0.4166	0.790
106	0.4333	0.783	107	0.4500	0.778	108	0.4666	0.771
109	0.4833	0.766	110	0.5000	0.761	111	0.5166	0.757
112	0.5333	0.750	113	0.5500	0.745	114	0.5666	0.742
115	0.5833	0.736	116	0.6000	0.731	117	0.6166	0.726
118	0.6333	0.726	119	0.6500	0.715	120	0.6666	0.710
121	0.6833	0.705	122	0.7000	0.700	123	0.7166	0.697
124	0.7333	0.691	125	0.7500	0.686	126	0.7666	0.681
127	0.7833	0.676	128	0.8000	0.672	129	0.8166	0.667
130	0.8333	0.662	131	0.8500	0.657	132	0.8666	0.653
133	0.8833	0.648	134	0.9000	0.643	135	0.9166	0.639
136	0.9333	0.634	137	0.9500	0.632	138	0.9666	0.627
139	0.9833	0.624	140	1.0000	0.618	141	1.2000	0.570
142	1.4000	0.525	143	1.6000	0.483	144	1.8000	0.442
145	2.0000	0.407	146	2.2000	0.374	147	2.4000	0.344
148	2.6000	0.317	149	2.8000	0.291	150	3.0000	0.268
151	3.2000	0.246	152	3.4000	0.227	153	3.6000	0.210

154	3.8000	0.192	155	4.0000	0.177	156	4.2000	0.163
157	4.4000	0.149	158	4.6000	0.137	159	4.8000	0.126
160	5.0000	0.117	161	5.2000	0.107	162	5.4000	0.099
163	5.6000	0.090	164	5.8000	0.084	165	6.0000	0.076
166	6.2000	0.071	167	6.4000	0.064	168	6.6000	0.057
169	6.8000	0.053	170	7.0000	0.050	171	7.2000	0.045
172	7.4000	0.041	173	7.6000	0.036	174	7.8000	0.033
175	8.0000	0.031	176	8.2000	0.027	177	8.4000	0.026
178	8.6000	0.024	179	8.8000	0.020	180	9.0000	0.019
181	9.2000	0.017	182	9.4000	0.015	183	9.6000	0.014
184	9.8000	0.012	185	10.0000	0.010	186	12.0000	0.263

Fort Devens - Groups 3&6
G6M-93-14X TEST 1
Russell Johnson

Results

Hydraulic Conductivity: 2.04E+00 ft/day
7.19E-04 cm/sec
Y-Intercept (Y₀): 1.77E+00 ft
Well Screen Ratio (L_e/r_w): 20.5
Dimensionless Parameter A: 2.22
Dimensionless Parameter B: 0.34
Slope of Line [ln(Y₀/Y_t)/t]: 3.946E-01 1/min
Well Parameters (R_c² / 2*L_e): 1.700E-03 ft
Dimensionless Ratio [ln(R_e/r_w)]: 2.109

Well/Aquifer Parameters

Depth of well: 21.20 ft
Length of well screen: 8.50 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.847	2	0.0066	1.840	3	0.0100	1.840
4	0.0133	1.828	5	0.0166	1.824	6	0.0200	1.818
7	0.0233	1.812	8	0.0266	1.805	9	0.0300	1.812
10	0.0333	1.802	11	0.0366	1.796	12	0.0400	1.790
13	0.0433	1.790	14	0.0466	1.783	15	0.0500	1.774
16	0.0533	1.771	17	0.0566	1.771	18	0.0600	1.761
19	0.0633	1.768	20	0.0666	1.761	21	0.0700	1.752
22	0.0733	1.755	23	0.0766	1.745	24	0.0800	1.745

25	0.0833	1.739	26	0.0866	1.736	27	0.0900	1.733
28	0.0933	1.730	29	0.0966	1.730	30	0.1000	1.723
31	0.1033	1.720	32	0.1066	1.717	33	0.1100	1.714
34	0.1133	1.714	35	0.1166	1.711	36	0.1200	1.701
37	0.1233	1.704	38	0.1266	1.698	39	0.1300	1.692
40	0.1333	1.692	41	0.1366	1.682	42	0.1400	1.685
43	0.1433	1.685	44	0.1466	1.676	45	0.1500	1.663
46	0.1533	1.669	47	0.1566	1.669	48	0.1600	1.666
49	0.1633	1.663	50	0.1666	1.650	51	0.1700	1.657
52	0.1733	1.657	53	0.1766	1.654	54	0.1800	1.650
55	0.1833	1.647	56	0.1866	1.644	57	0.1900	1.644
58	0.1933	1.641	59	0.1966	1.625	60	0.2000	1.631
61	0.2033	1.631	62	0.2066	1.628	63	0.2100	1.625
64	0.2133	1.625	65	0.2166	1.635	66	0.2200	1.619
67	0.2233	1.616	68	0.2266	1.613	69	0.2300	1.609
70	0.2333	1.613	71	0.2366	1.609	72	0.2400	1.606
73	0.2433	1.603	74	0.2466	1.600	75	0.2500	1.603
76	0.2533	1.594	77	0.2566	1.587	78	0.2600	1.590
79	0.2633	1.581	80	0.2666	1.587	81	0.2700	1.584
82	0.2733	1.584	83	0.2766	1.578	84	0.2800	1.575
85	0.2833	1.571	86	0.2866	1.568	87	0.2900	1.568
88	0.2933	1.565	89	0.2966	1.562	90	0.3000	1.562
91	0.3033	1.559	92	0.3066	1.559	93	0.3100	1.562
94	0.3133	1.552	95	0.3166	1.552	96	0.3200	1.546
97	0.3233	1.546	98	0.3266	1.543	99	0.3300	1.540
100	0.3333	1.537	101	0.3500	1.524	102	0.3666	1.514
103	0.3833	1.505	104	0.4000	1.492	105	0.4166	1.483
106	0.4333	1.477	107	0.4500	1.458	108	0.4666	1.448
109	0.4833	1.439	110	0.5000	1.426	111	0.5166	1.420
112	0.5333	1.410	113	0.5500	1.401	114	0.5666	1.391
115	0.5833	1.382	116	0.6000	1.372	117	0.6166	1.366
118	0.6333	1.353	119	0.6500	1.347	120	0.6666	1.337
121	0.6833	1.331	122	0.7000	1.322	123	0.7166	1.315
124	0.7333	1.306	125	0.7500	1.299	126	0.7666	1.290
127	0.7833	1.280	128	0.8000	1.271	129	0.8166	1.265
130	0.8333	1.255	131	0.8500	1.249	132	0.8666	1.239
133	0.8833	1.230	134	0.9000	1.223	135	0.9166	1.214
136	0.9333	1.208	137	0.9500	1.198	138	0.9666	1.192
139	0.9833	1.182	140	1.0000	1.176	141	1.2000	1.078
142	1.4000	1.002	143	1.6000	0.923	144	1.8000	0.850
145	2.0000	0.787	146	2.2000	0.727	147	2.4000	0.673
148	2.6000	0.619	149	2.8000	0.572	150	3.0000	0.531
151	3.2000	0.490	152	3.4000	0.455	153	3.6000	0.423
154	3.8000	0.389	155	4.0000	0.360	156	4.2000	0.335
157	4.4000	0.309	158	4.6000	0.290	159	4.8000	0.268
160	5.0000	0.249	161	5.2000	0.230	162	5.4000	0.215

163	5.6000	0.202	164	5.8000	0.189	165	6.0000	0.177
166	6.2000	0.164	167	6.4000	0.154	168	6.6000	0.145
169	6.8000	0.135	170	7.0000	0.126	171	7.2000	0.120
172	7.4000	0.113	173	7.6000	0.107	174	7.8000	0.101
175	8.0000	0.094	176	8.2000	0.088	177	8.4000	0.085
178	8.6000	0.075	179	8.8000	0.075	180	9.0000	0.072
181	9.2000	0.066	182	9.4000	0.066	183	9.6000	0.063
184	9.8000	0.060	185	10.0000	0.056	186	12.0000	0.037
187	14.0000	0.025	188	16.0000	0.025	189	18.0000	0.616

Fort Devens - Groups 3&6
G6M-93-14X TEST 3
Russell Johnson

Results

Hydraulic Conductivity: 2.24E+00 ft/day
7.89E-04 cm/sec
Y-Intercept (Yo): 1.76E+00 ft
Well Screen Ratio (Le/rw): 20.5
Dimensionless Parameter A: 2.22
Dimensionless Parameter B: 0.34
Slope of Line [$\ln(Y_o/Y_t)/t$]: 4.333E-01 1/min
Well Parameters ($Rc^2 / 2*Le$): 1.700E-03 ft
Dimensionless Ratio [$\ln(Re/rw)$]: 2.109

Well/Aquifer Parameters

Depth of well: 21.20 ft
Length of well screen: 8.50 ft
Saturated thickness: 100.00 ft
Diameter of the well casing: 0.340 ft
Diameter of the well filter: 0.830 ft

Time vs Drawdown Data

No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)	No.	Time (min)	Drawdown (ft)
1	0.0033	1.823	2	0.0066	1.813	3	0.0100	1.810
4	0.0133	1.801	5	0.0166	1.797	6	0.0200	1.791
7	0.0233	1.797	8	0.0266	1.788	9	0.0300	1.782
10	0.0333	1.769	11	0.0366	1.772	12	0.0400	1.772
13	0.0433	1.772	14	0.0466	1.753	15	0.0500	1.766
16	0.0533	1.750	17	0.0566	1.750	18	0.0600	1.756
19	0.0633	1.744	20	0.0666	1.753	21	0.0700	1.750
22	0.0733	1.737	23	0.0766	1.731	24	0.0800	1.718

25	0.0833	1.731	26	0.0866	1.725	27	0.0900	1.718
28	0.0933	1.737	29	0.0966	1.728	30	0.1000	1.712
31	0.1033	1.690	32	0.1066	1.658	33	0.1100	1.674
34	0.1133	1.677	35	0.1166	1.671	36	0.1200	1.668
37	0.1233	1.661	38	0.1266	1.658	39	0.1300	1.661
40	0.1333	1.639	41	0.1366	1.655	42	0.1400	1.608
43	0.1433	1.652	44	0.1466	1.617	45	0.1500	1.639
46	0.1533	1.633	47	0.1566	1.630	48	0.1600	1.614
49	0.1633	1.630	50	0.1666	1.624	51	0.1700	1.592
52	0.1733	1.624	53	0.1766	1.614	54	0.1800	1.614
55	0.1833	1.611	56	0.1866	1.620	57	0.1900	1.601
58	0.1933	1.595	59	0.1966	1.592	60	0.2000	1.592
61	0.2033	1.595	62	0.2066	1.579	63	0.2100	1.589
64	0.2133	1.586	65	0.2166	1.576	66	0.2200	1.583
67	0.2233	1.570	68	0.2266	1.576	69	0.2300	1.573
70	0.2333	1.570	71	0.2366	1.567	72	0.2400	1.564
73	0.2433	1.548	74	0.2466	1.560	75	0.2500	1.557
76	0.2533	1.557	77	0.2566	1.551	78	0.2600	1.541
79	0.2633	1.541	80	0.2666	1.538	81	0.2700	1.535
82	0.2733	1.535	83	0.2766	1.532	84	0.2800	1.541
85	0.2833	1.529	86	0.2866	1.526	87	0.2900	1.522
88	0.2933	1.529	89	0.2966	1.522	90	0.3000	1.516
91	0.3033	1.516	92	0.3066	1.513	93	0.3100	1.513
94	0.3133	1.497	95	0.3166	1.504	96	0.3200	1.507
97	0.3233	1.500	98	0.3266	1.500	99	0.3300	1.497
100	0.3333	1.497	101	0.3500	1.481	102	0.3666	1.472
103	0.3833	1.459	104	0.4000	1.450	105	0.4166	1.440
106	0.4333	1.428	107	0.4500	1.418	108	0.4666	1.406
109	0.4833	1.396	110	0.5000	1.387	111	0.5166	1.380
112	0.5333	1.368	113	0.5500	1.358	114	0.5666	1.352
115	0.5833	1.342	116	0.6000	1.333	117	0.6166	1.323
118	0.6333	1.323	119	0.6500	1.304	120	0.6666	1.295
121	0.6833	1.286	122	0.7000	1.276	123	0.7166	1.270
124	0.7333	1.260	125	0.7500	1.251	126	0.7666	1.241
127	0.7833	1.232	128	0.8000	1.225	129	0.8166	1.216
130	0.8333	1.206	131	0.8500	1.197	132	0.8666	1.191
133	0.8833	1.181	134	0.9000	1.172	135	0.9166	1.165
136	0.9333	1.156	137	0.9500	1.153	138	0.9666	1.143
139	0.9833	1.137	140	1.0000	1.127	141	1.2000	1.039
142	1.4000	0.957	143	1.6000	0.881	144	1.8000	0.805
145	2.0000	0.742	146	2.2000	0.682	147	2.4000	0.628
148	2.6000	0.578	149	2.8000	0.530	150	3.0000	0.489
151	3.2000	0.448	152	3.4000	0.413	153	3.6000	0.382
154	3.8000	0.350	155	4.0000	0.322	156	4.2000	0.297
157	4.4000	0.271	158	4.6000	0.249	159	4.8000	0.230
160	5.0000	0.214	161	5.2000	0.195	162	5.4000	0.180

163	5.6000	0.164	164	5.8000	0.154	165	6.0000	0.139
166	6.2000	0.129	167	6.4000	0.116	168	6.6000	0.104
169	6.8000	0.097	170	7.0000	0.091	171	7.2000	0.082
172	7.4000	0.075	173	7.6000	0.066	174	7.8000	0.060
175	8.0000	0.056	176	8.2000	0.050	177	8.4000	0.047
178	8.6000	0.044	179	8.8000	0.037	180	9.0000	0.034
181	9.2000	0.031	182	9.4000	0.028	183	9.6000	0.025
184	9.8000	0.022	185	10.0000	0.018	186	12.0000	0.037

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 10

SETUP	TEST ID 01401	DATE	BY WHOM
MONITORING WELL ID	66M-93-14X	R. JOHNSON + D. PIERCE	
DATE OF TEST	7-1-93		
TYPE OF TEST	RIISING HEAD #1		
HERMIT TYPE/SERIAL#	SE1000C/1K001732		
TEST #	SEL 10 (1 OF 2)		
DATA COLLECTION RATE	LOG 1		
TRANSDUCER			
SERIAL #	PTX-161 / 20460E		
PSIG	10		
SCALE FACTOR	10.003		
OFFSET	-0.034		
INPUT CHANNEL	1		
TEST DATA			
INPUT MODE (TOC/SUR)	TOC		
STATIC WATER LEVEL (FT./TOC)	12.68		
WELL DEPTH (FT./TOC)	21.2		
XD DEPTH (FT./TOC) BELOW ∇	8.33		
INITIAL XD REFERENCE	0.00		
SLUG DEPTH (FT./TOC)	12.7		
TIME OF SLUG PLACEMENT	10 ¹⁵		
TIME OF WL EQUILIBRATION	10 ³¹		
NEW XD REFERENCE	-0.05	8.28 - 8.33	
START TIME OF TEST	10 32		
END TIME OF TEST	10 48		
NOTES:			

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 11

TEST ID SETUP <u>61402</u>	DATE	BY WHOM
MONITORING WELL ID	<u>GGM-93-14X</u>	<u>R. JOHNSON + D. PIERCE</u>
DATE OF TEST	<u>7-1-93</u>	
TYPE OF TEST	<u>RISING HEAD #2</u>	
HERMIT TYPE/SERIAL#	<u>SE1000C/1KC#1732</u>	
TEST #	<u>SEL 11 (20F2)</u>	
DATA COLLECTION RATE	<u>LOG 1</u>	
TRANSDUCER		
SERIAL #	<u>PTX-161/2048 DE</u>	
PSIG	<u>10</u>	
SCALE FACTOR	<u>10.003</u>	
OFFSET	<u>-0.034</u>	
INPUT CHANNEL	<u>1</u>	
TEST DATA		
INPUT MODE (TOC/SUR)	<u>TOC</u>	
STATIC WATER LEVEL (FT./TOC)	<u>12.68</u>	
WELL DEPTH (FT./TOC)	<u>21.2</u>	
XD DEPTH (FT./TOC) BELOW ∇	<u>8.26</u>	
INITIAL XD REFERENCE	<u>0.00</u>	
SLUG DEPTH (FT./TOC)	<u>12.56</u>	
TIME OF SLUG PLACEMENT	<u>10 50</u>	
TIME OF WL EQUILIBRATION	<u>11 06</u>	
NEW XD REFERENCE	<u>0.00</u>	<u>9.26 - 8.26</u>
START TIME OF TEST	<u>11 07</u>	
END TIME OF TEST	<u>11 28</u>	
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

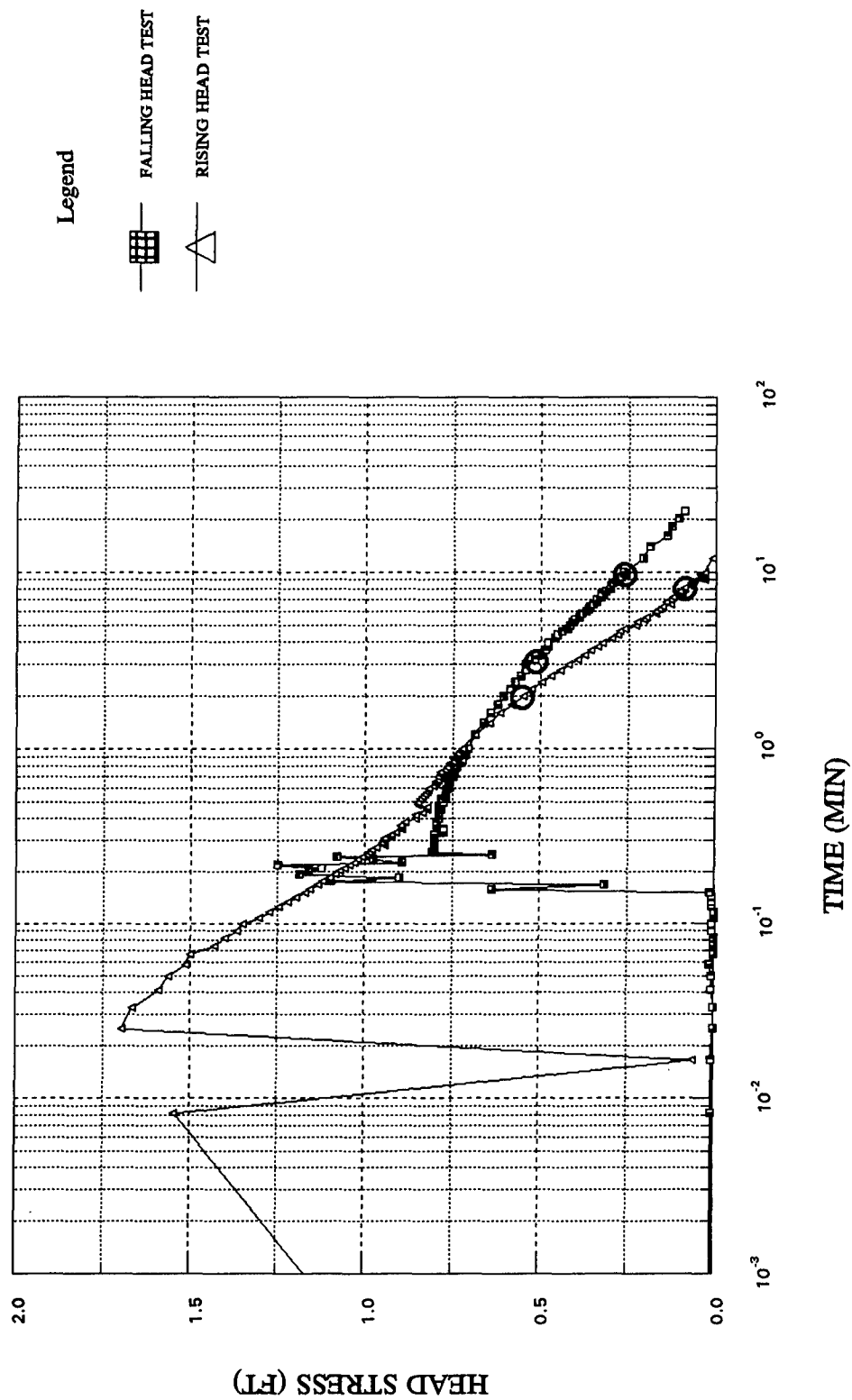
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. SEL 14

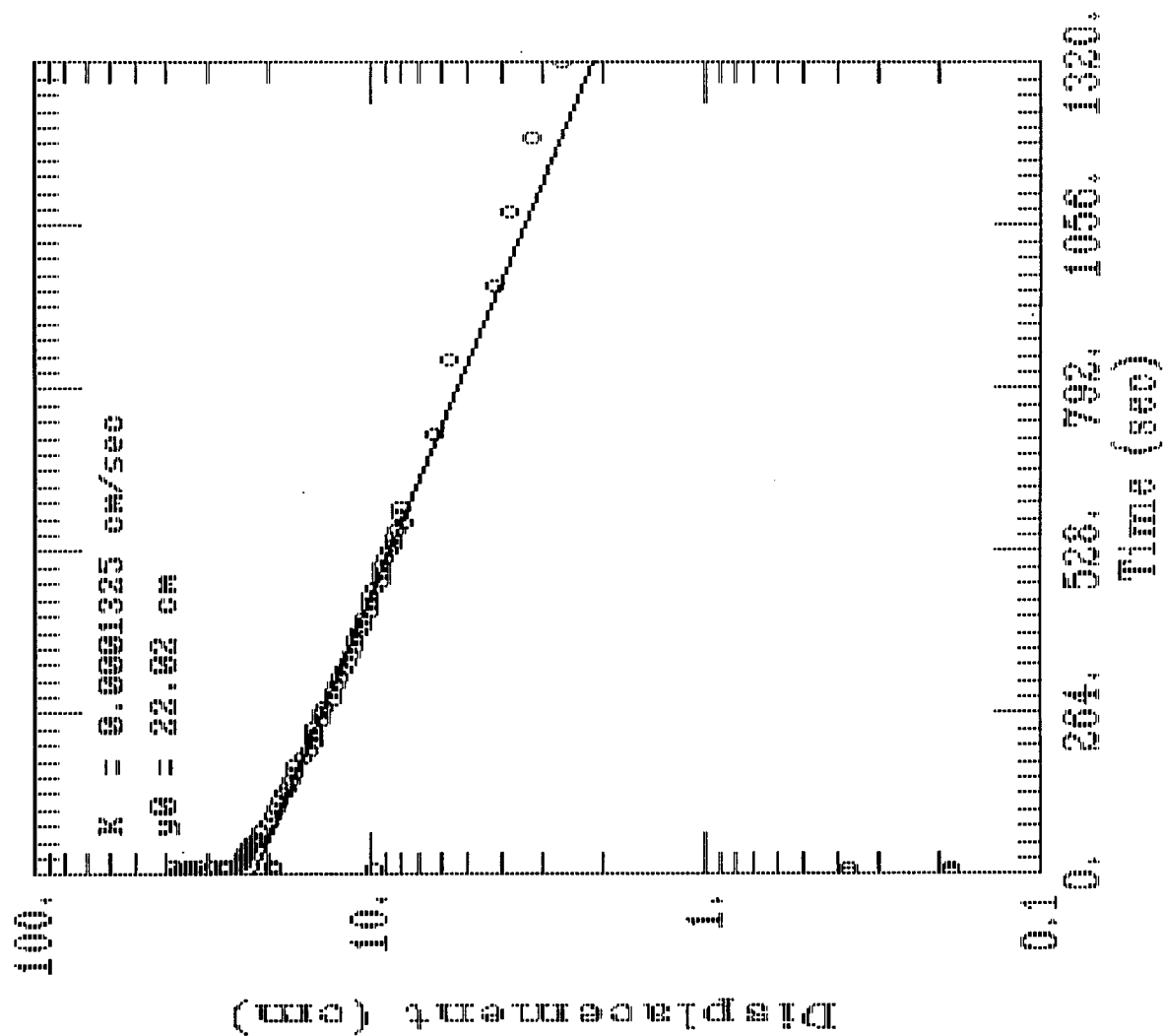
SETUP	TEST ID	DATE	BY WHOM
	<u>01403</u>		
MONITORING WELL ID		<u>GGM-93-14X</u>	
DATE OF TEST		<u>7-1-93</u>	
TYPE OF TEST		<u>RISING HEAD #3</u>	
HERMIT TYPE/SERIAL#		<u>SE-1000C/KC01732</u>	
TEST #		<u>SEL 14 (3rd)</u>	
DATA COLLECTION RATE		<u>LOG 1</u>	
TRANSDUCER			
SERIAL #		<u>PTX-161/20450E</u>	
PSIG		<u>10</u>	
SCALE FACTOR		<u>9.987</u>	
OFFSET		<u>-0.036</u>	
INPUT CHANNEL		<u>1</u>	
TEST DATA			
INPUT MODE (TOC/SUR)		<u>TOC</u>	
STATIC WATER LEVEL (FT./TOC)		<u>12.65</u>	
WELL DEPTH (FT./TOC)		<u>21.2</u>	
XD DEPTH (FT./TOC) BELOW ∇		<u>7.38</u>	
INITIAL XD REFERENCE		<u>0.00</u>	
SLUG DEPTH (FT./TOC)		<u>12.85</u>	
TIME OF SLUG PLACEMENT		<u>1538</u>	
TIME OF WL EQUILIBRATION		<u>1551</u>	
NEW XD REFERENCE		<u>0.06</u>	<u>(7.44-7.38)</u>
START TIME OF TEST		<u>1551</u>	
END TIME OF TEST		<u>1604</u>	
NOTES:	<u>REPEAT TEST FOR COMPARISON W/ PREVIOUS TWO TESTS</u>		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

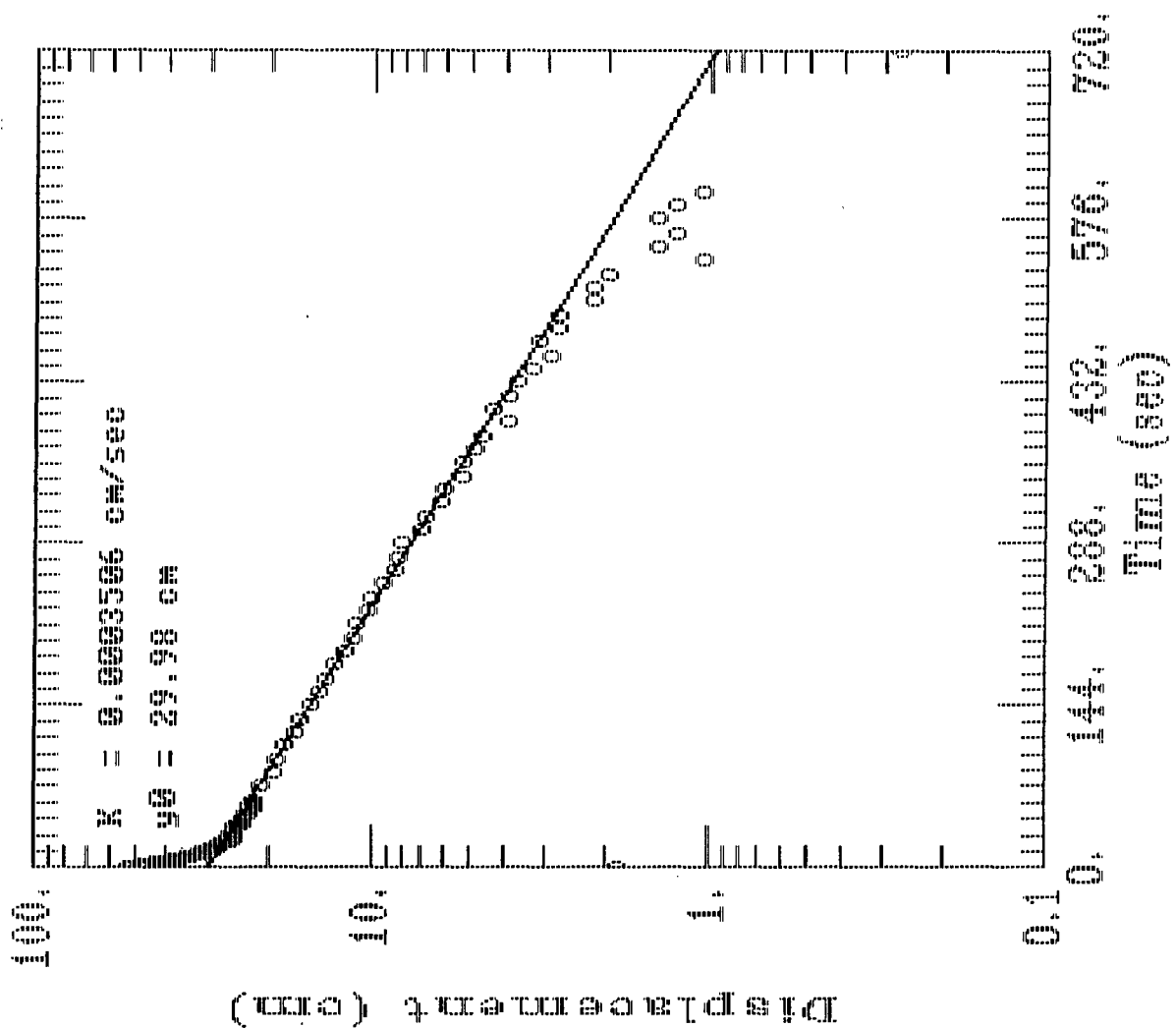
G6M-94-15A PERMEABILITY TESTS



GM-94-15A PERMEABILITY TEST #1



COM-04-101 PERMEABILITY TEST #2



G6M-94-15A PERMEABILITY TESTING

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 4.8 FT, BORING DIAMETER = 0.833

TEST #1 FALLING HEAD

MINUTES	FEET
0	0.006
0.0083	0.006
0.0166	0.006
0.025	0
0.0333	0
0.0416	0.006
0.05	0.006
0.0583	0.012
0.0666	0
0.075	0
0.0833	0
0.0916	0.006
0.1	0.006
0.1083	0
0.1166	0
0.125	0.006
0.1333	0.006
0.1416	0.006
0.15	0.012
0.1583	0.638
0.1666	0.315
0.175	1.099
0.1833	0.903
0.1916	1.187
0.2	1.162
0.2083	1.124
0.2166	1.251
0.225	0.897
0.2333	0.979
0.2416	1.08
0.25	0.638
0.2583	0.808
0.2666	0.802
0.275	0.802
0.2833	0.802
0.2916	0.802
0.3	0.802
0.3083	0.802
0.3166	0.802
0.325	0.802
0.3333	0.777
0.35	0.777
0.3666	0.796
0.3833	0.796
0.4	0.789
0.4166	0.789
0.4333	0.789
0.45	0.783
0.4666	0.789
0.4833	0.783
0.5	0.777
0.5166	0.783
0.5333	0.77
0.55	0.77
0.5666	0.77
0.5833	0.77
0.6	0.764
0.6166	0.764
0.6333	0.764
0.65	0.758
0.6666	0.764
0.6833	0.764
0.7	0.751
0.7166	0.751
0.7333	0.745
0.75	0.745
0.7666	0.745
0.7833	0.739

TEST #2 RISING HEAD

MINUTES	FEET
0	1.121
0.0083	1.544
0.0166	0.06
0.025	1.696
0.0333	1.665
0.0416	1.589
0.05	1.563
0.0583	1.513
0.0666	1.5
0.075	1.431
0.0833	1.399
0.0916	1.368
0.1	1.349
0.1083	1.304
0.1166	1.273
0.125	1.247
0.1333	1.222
0.1416	1.197
0.15	1.172
0.1583	1.159
0.1666	1.134
0.175	1.121
0.1833	1.102
0.1916	1.083
0.2	1.071
0.2083	1.058
0.2166	1.045
0.225	1.033
0.2333	1.02
0.2416	1.007
0.25	0.995
0.2583	0.988
0.2666	0.982
0.275	0.969
0.2833	0.944
0.2916	0.951
0.3	0.944
0.3083	0.944
0.3166	0.932
0.325	0.925
0.3333	0.913
0.35	0.894
0.3666	0.9
0.3833	0.887
0.4	0.856
0.4166	0.856
0.4333	0.837
0.45	0.824
0.4666	0.824
0.4833	0.849
0.5	0.849
0.5166	0.843
0.5333	0.837
0.55	0.83
0.5666	0.824
0.5833	0.818
0.6	0.818
0.6166	0.805
0.6333	0.799
0.65	0.799
0.6666	0.793
0.6833	0.786
0.7	0.793
0.7166	0.786
0.7333	0.786
0.75	0.767
0.7666	0.774
0.7833	0.767

G6M-94-15A PERMEABILITY TESTING

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 4.8 FT, BORING DIAMETER = 0.833

TEST #1	
FALLING HEAD	
MINUTES	FEET
0.8	0.739
0.8166	0.739
0.8333	0.733
0.85	0.726
0.8666	0.733
0.8833	0.733
0.9	0.726
0.9166	0.72
0.9333	0.714
0.95	0.72
0.9666	0.714
0.9833	0.714
1	0.707
1.2	0.688
1.4	0.663
1.6	0.644
1.8	0.625
2	0.606
2.2	0.587
2.4	0.575
2.6	0.556
2.8	0.543
3	0.543
3.2	0.518
3.4	0.499
3.6	0.486
3.8	0.48
4	0.48
4.2	0.461
4.4	0.454
4.6	0.442
4.8	0.423
5	0.417
5.2	0.41
5.4	0.404
5.6	0.391
5.8	0.385
6	0.372
6.2	0.366
6.4	0.36
6.6	0.353
6.8	0.341
7	0.341
7.2	0.328
7.4	0.322
7.6	0.328
7.8	0.315
8	0.303
8.2	0.303
8.4	0.303
8.6	0.296
8.8	0.284
9	0.278
9.2	0.278
9.4	0.271
9.6	0.259
9.8	0.265
10	0.265
12	0.208
14	0.189
16	0.139
18	0.126
20	0.107
22	0.088

TEST #2	
RISING HEAD	
MINUTES	FEET
0.8	0.748
0.8166	0.761
0.8333	0.755
0.85	0.748
0.8666	0.723
0.8833	0.748
0.9	0.742
0.9166	0.736
0.9333	0.736
0.95	0.736
0.9666	0.729
0.9833	0.723
1	0.723
1.2	0.685
1.4	0.647
1.6	0.616
1.8	0.584
2	0.552
2.2	0.527
2.4	0.496
2.6	0.47
2.8	0.445
3	0.42
3.2	0.394
3.4	0.375
3.6	0.357
3.8	0.338
4	0.325
4.2	0.3
4.4	0.281
4.6	0.274
4.8	0.262
5	0.23
5.2	0.224
5.4	0.205
5.6	0.199
5.8	0.173
6	0.173
6.2	0.161
6.4	0.154
6.6	0.129
6.8	0.142
7	0.129
7.2	0.123
7.4	0.11
7.6	0.097
7.8	0.104
8	0.091
8.2	0.091
8.4	0.072
8.6	0.072
8.8	0.066
9	0.034
9.2	0.047
9.4	0.041
9.6	0.047
9.8	0.041
10	0.034
12	0.009

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 4

SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-94-15A	B. Schoonard M. Kounsberg
DATE OF TEST	3/22/95	
TYPE OF TEST	Falling Head	
HERMIT TYPE/SERIAL#	SE 2000/3K-131	
TEST #	4	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	
STATIC WATER LEVEL (FT./TOC)	39.2	
WELL DEPTH (FT./TOC)	44' +/-	
XD DEPTH (FT./TOC)	44'	
INITIAL XD REFERENCE	Set at 0	
SLUG DEPTH (FT./TOC)	44	
TIME OF SLUG PLACEMENT	10:52	
TIME OF WL EQUILIBRATION	11:14	≤ 0.088 SUR XD
NEW XD REFERENCE	NA	
START TIME OF TEST	10:52	
END TIME OF TEST	11:14	≤ 0.088 SUR XD
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

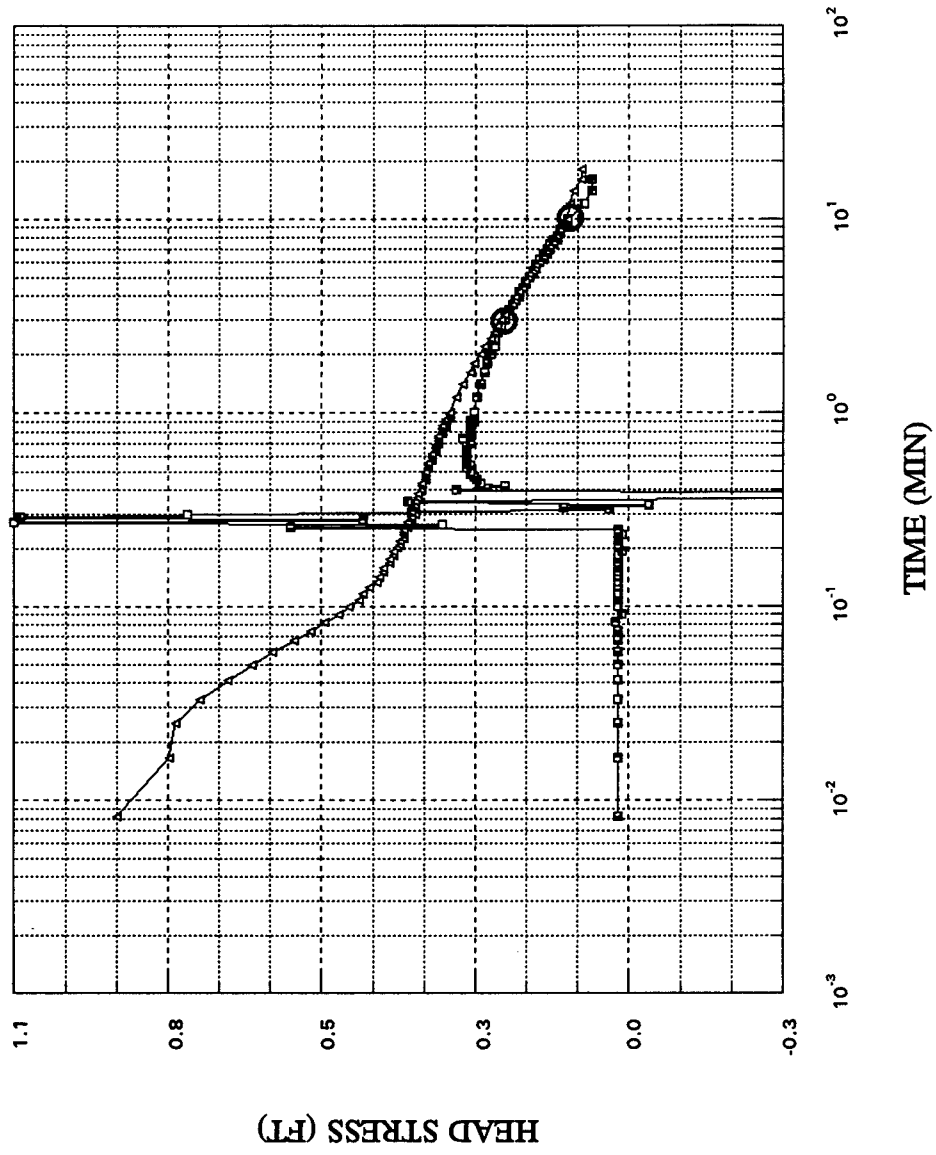
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 5

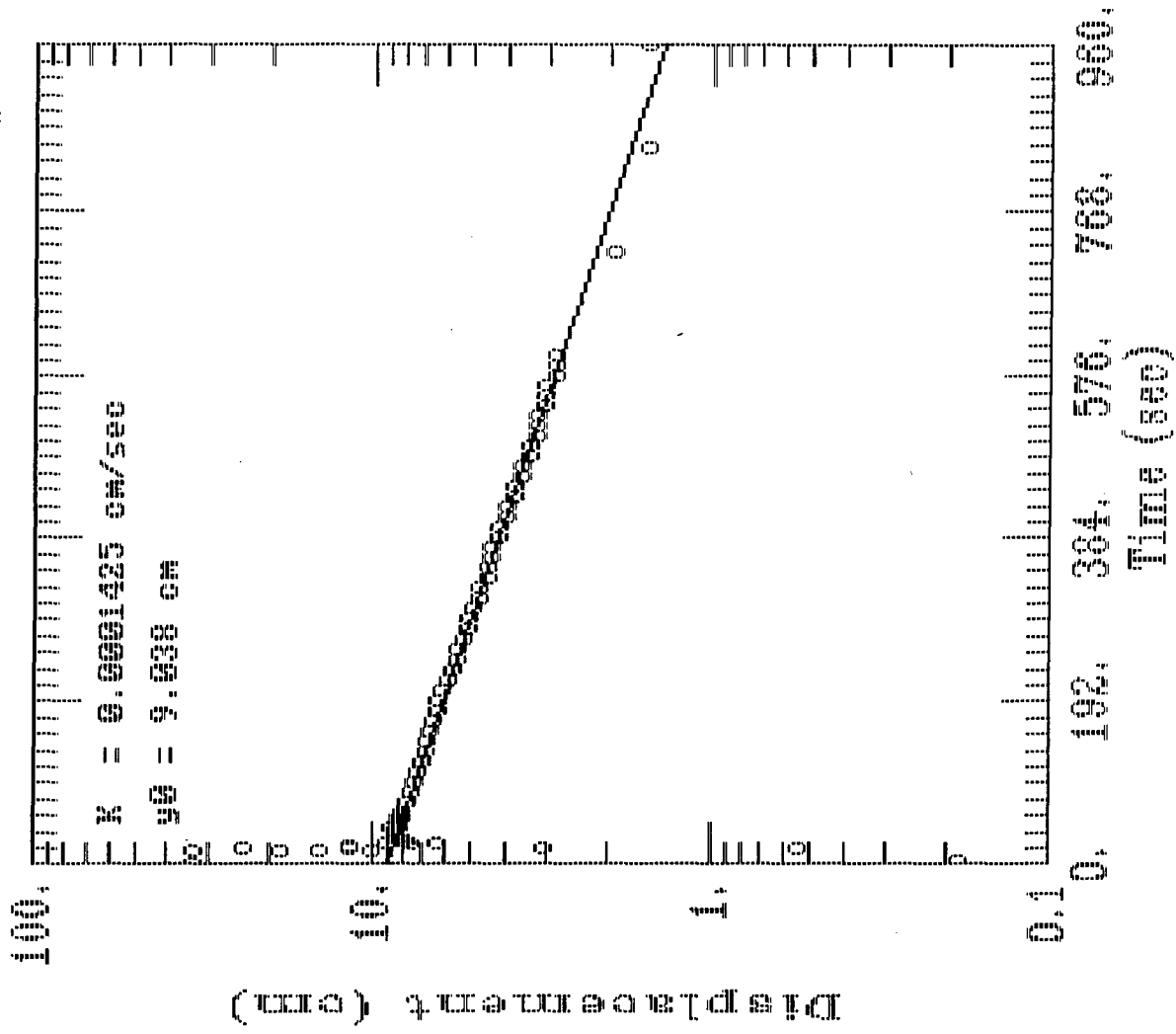
SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-94-15A	B. Schoonard
DATE OF TEST	3/22/95	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE 2000 / 2K-121	
TEST #	5	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	39.2	
WELL DEPTH (FT./TOC)	44' +/-	
XD DEPTH (FT./TOC)	44	
INITIAL XD REFERENCE	Set at 0	
SLUG DEPTH (FT./TOC)	44	
TIME OF SLUG PLACEMENT	10:52	
TIME OF WL EQUILIBRATION	11:14	
NEW XD REFERENCE	NA	
START TIME OF TEST	11:16	
END TIME OF TEST	11:28	↓ 0.126 TOC
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

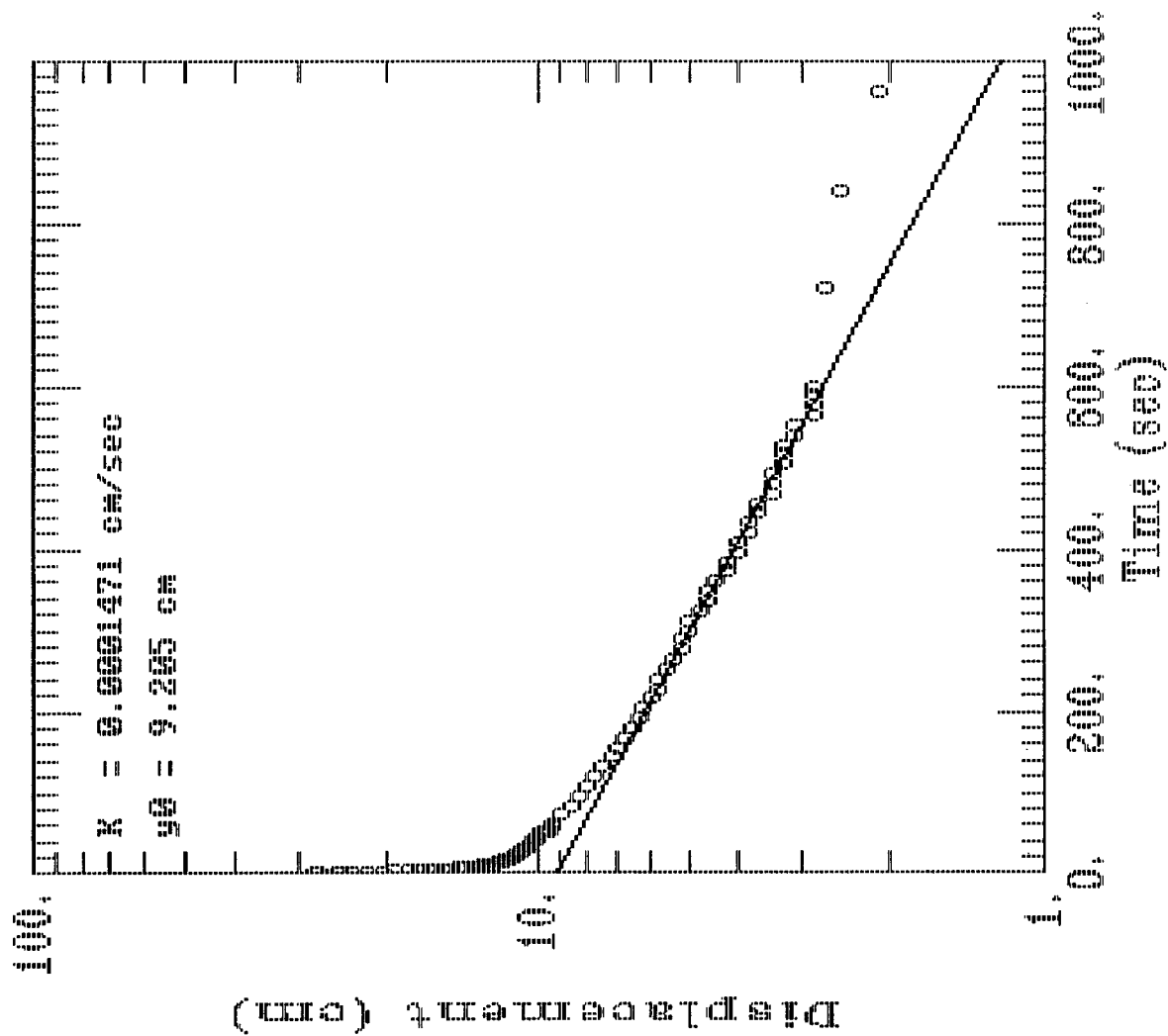
G6M-94-16X PERMEABILITY TESTS



GM-94-10X PROXIMITY TEST #1



GM-94-10X PERMEABILITY TEST #2



G6M-94-16X PERMEABILITY TESTING

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 6 FT, BORING DIAMETER = 0.833 FT

TEST #1 FALLING HEAD		TEST #2 RISING HEAD	
MINUTES	FEET	MINUTES	FEET
0	0	0	-0.025
0.0083	0	0.0083	0.916
0.0166	0	0.0166	0.821
0.025	0	0.025	0.808
0.0333	0	0.0333	0.764
0.0416	0	0.0416	0.714
0.05	0	0.05	0.669
0.0583	0	0.0583	0.631
0.0666	0	0.0666	0.593
0.075	0	0.075	0.562
0.0833	0.006	0.0833	0.537
0.0916	-0.006	0.0916	0.511
0.1	0	0.1	0.492
0.1083	0	0.1083	0.473
0.1166	0	0.1166	0.467
0.125	0	0.125	0.454
0.1333	0	0.1333	0.442
0.1416	0	0.1416	0.436
0.15	0	0.15	0.429
0.1583	0	0.1583	0.429
0.1666	0	0.1666	0.417
0.175	0	0.175	0.417
0.1833	0	0.1833	0.41
0.1916	-0.006	0.1916	0.41
0.2	0	0.2	0.404
0.2083	0	0.2083	0.398
0.2166	0	0.2166	0.398
0.225	0	0.225	0.391
0.2333	-0.006	0.2333	0.391
0.2416	0	0.2416	0.391
0.25	0	0.25	0.391
0.2583	0.6	0.2583	0.385
0.2666	0.322	0.2666	0.385
0.275	1.105	0.275	0.385
0.2833	0.467	0.2833	0.379
0.2916	1.093	0.2916	0.379
0.3	0.789	0.3	0.372
0.3083	0.379	0.3083	0.379
0.3166	0.018	0.3166	0.372
0.325	0.101	0.325	0.372
0.3333	-0.056	0.3333	0.372
0.35	0.385	0.35	0.372
0.3666	-0.436	0.3666	0.366
0.3833	-0.657	0.3833	0.366
0.4	0.296	0.4	0.36
0.4166	0.208	0.4166	0.36
0.4333	0.252	0.4333	0.36
0.45	0.259	0.45	0.353
0.4666	0.265	0.4666	0.353
0.4833	0.271	0.4833	0.353
0.5	0.271	0.5	0.353
0.5166	0.278	0.5166	0.347
0.5333	0.271	0.5333	0.347
0.55	0.278	0.55	0.347
0.5666	0.278	0.5666	0.341
0.5833	0.278	0.5833	0.341
0.6	0.278	0.6	0.341
0.6166	0.278	0.6166	0.341
0.6333	0.278	0.6333	0.334
0.65	0.278	0.65	0.334
0.6666	0.278	0.6666	0.334
0.6833	0.278	0.6833	0.334
0.7	0.271	0.7	0.328
0.7166	0.271	0.7166	0.328
0.7333	0.284	0.7333	0.328
0.75	0.271	0.75	0.328
0.7666	0.271	0.7666	0.328
0.7833	0.271	0.7833	0.322

G6M-94-16X PERMEABILITY TESTING

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 6 FT, BORING DIAMETER = 0.833 FT

TEST #1 FALLING HEAD

MINUTES	FEET
0.8	0.271
0.8166	0.271
0.8333	0.271
0.85	0.271
0.8666	0.271
0.8833	0.271
0.9	0.265
0.9166	0.271
0.9333	0.265
0.95	0.265
0.9666	0.265
0.9833	0.265
1	0.265
1.2	0.259
1.4	0.252
1.6	0.246
1.8	0.24
2	0.233
2.2	0.227
2.4	0.227
2.6	0.221
2.8	0.214
3	0.208
3.2	0.208
3.4	0.202
3.6	0.195
3.8	0.189
4	0.183
4.2	0.183
4.4	0.176
4.6	0.17
4.8	0.17
5	0.164
5.2	0.157
5.4	0.157
5.6	0.151
5.8	0.151
6	0.145
6.2	0.145
6.4	0.139
6.6	0.139
6.8	0.132
7	0.132
7.2	0.126
7.4	0.126
7.6	0.12
7.8	0.12
8	0.113
8.2	0.113
8.4	0.107
8.6	0.107
8.8	0.107
9	0.101
9.2	0.101
9.4	0.101
9.6	0.094
9.8	0.094
10	0.094
12	0.063
14	0.05
16	0.05

TEST #2 RISING HEAD

MINUTES	FEET
0.8	0.322
0.8166	0.322
0.8333	0.322
0.85	0.315
0.8666	0.322
0.8833	0.315
0.9	0.315
0.9166	0.315
0.9333	0.315
0.95	0.309
0.9666	0.309
0.9833	0.309
1	0.309
1.2	0.296
1.4	0.284
1.6	0.271
1.8	0.265
2	0.252
2.2	0.246
2.4	0.233
2.6	0.227
2.8	0.221
3	0.214
3.2	0.208
3.4	0.202
3.6	0.195
3.8	0.189
4	0.189
4.2	0.183
4.4	0.176
4.6	0.17
4.8	0.17
5	0.164
5.2	0.164
5.4	0.157
5.6	0.151
5.8	0.151
6	0.145
6.2	0.139
6.4	0.139
6.6	0.132
6.8	0.132
7	0.126
7.2	0.126
7.4	0.12
7.6	0.12
7.8	0.113
8	0.113
8.2	0.113
8.4	0.107
8.6	0.107
8.8	0.107
9	0.101
9.2	0.101
9.4	0.094
9.6	0.094
9.8	0.094
10	0.094
12	0.088
14	0.082
16	0.069
18	0.069

20011501

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 6

SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-94-16X	B. Schoonard M. Lounsbury
DATE OF TEST	3/22/95	
TYPE OF TEST	Falling Head	
HERMIT TYPE/SERIAL#	SE 2000/2K-121	
TEST #	0	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	
STATIC WATER LEVEL (FT./TOC)	38'	
WELL DEPTH (FT./TOC)	44' +/-	
XD DEPTH (FT./TOC)	44'	
INITIAL XD REFERENCE	0.0	
SLUG DEPTH (FT./TOC)	44	
TIME OF SLUG PLACEMENT	0900	
TIME OF WL EQUILIBRATION	1918	± 0.05 SUR XD
NEW XD REFERENCE	NA	
START TIME OF TEST	0900	
END TIME OF TEST	0918	± 0.05 SUR XD
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

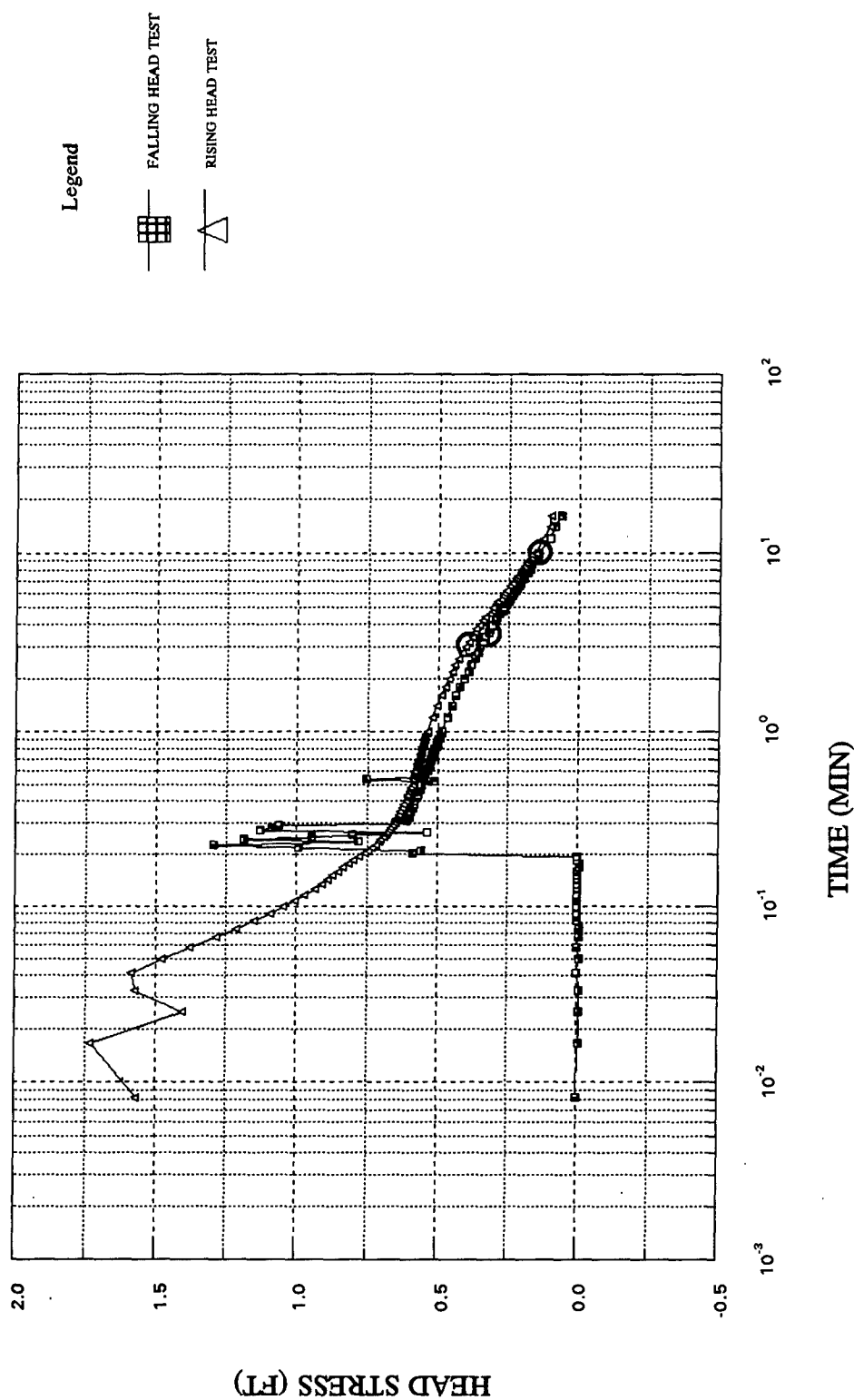
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 1

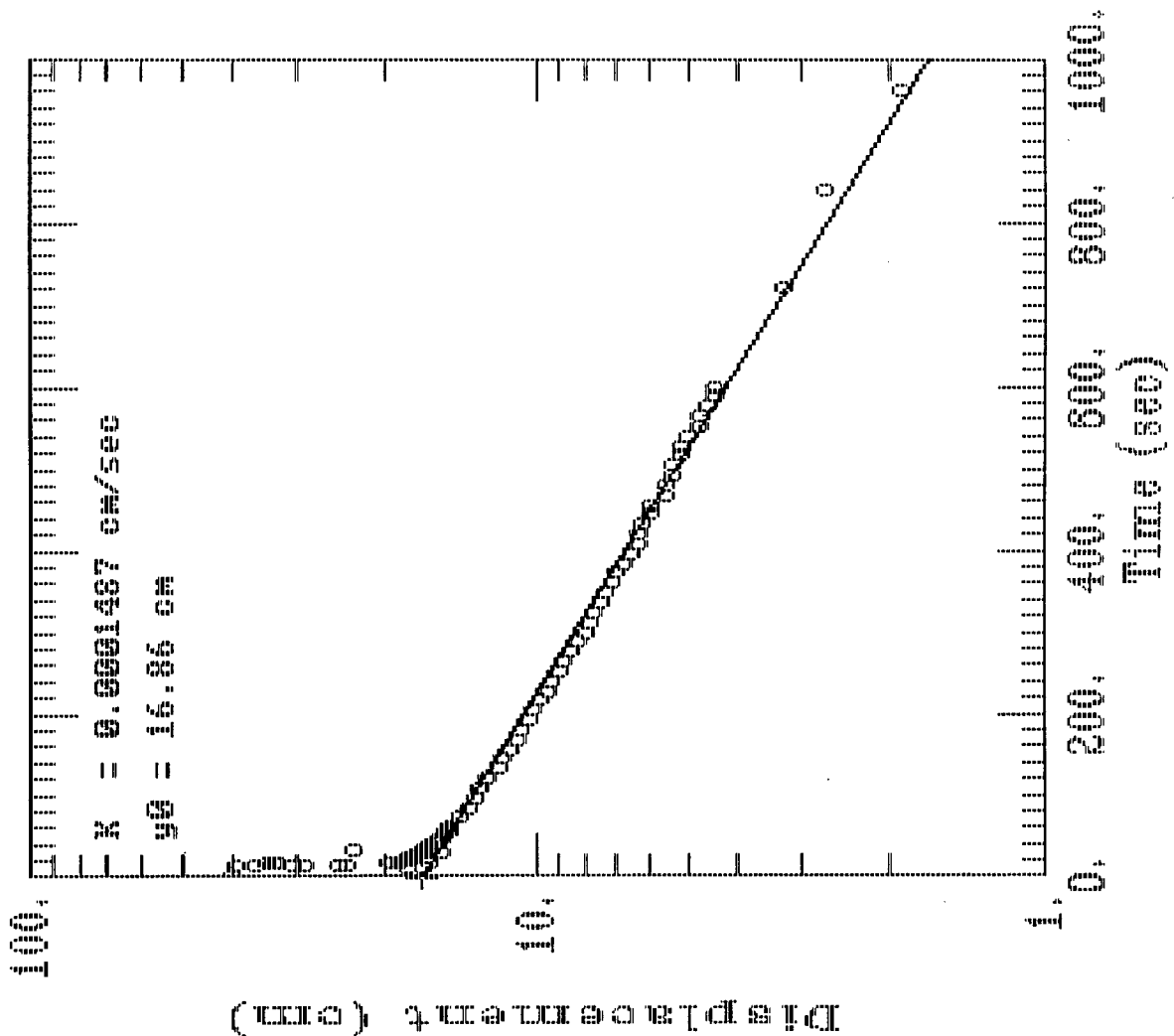
SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-94-16X	B. Schoonard
DATE OF TEST	3/22/95	M. Lowasbury
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE 2000/2K-121	
TEST #	1	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	38'	
WELL DEPTH (FT./TOC)	44' 1/2	
XD DEPTH (FT./TOC)	44'	
INITIAL XD REFERENCE	0.0	
SLUG DEPTH (FT./TOC)	44'	
TIME OF SLUG PLACEMENT	0900	
TIME OF WL EQUILIBRATION	1918	
NEW XD REFERENCE	NA	
START TIME OF TEST	0920	St Ref 0
END TIME OF TEST	0938	± 0.069 TOC XD
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

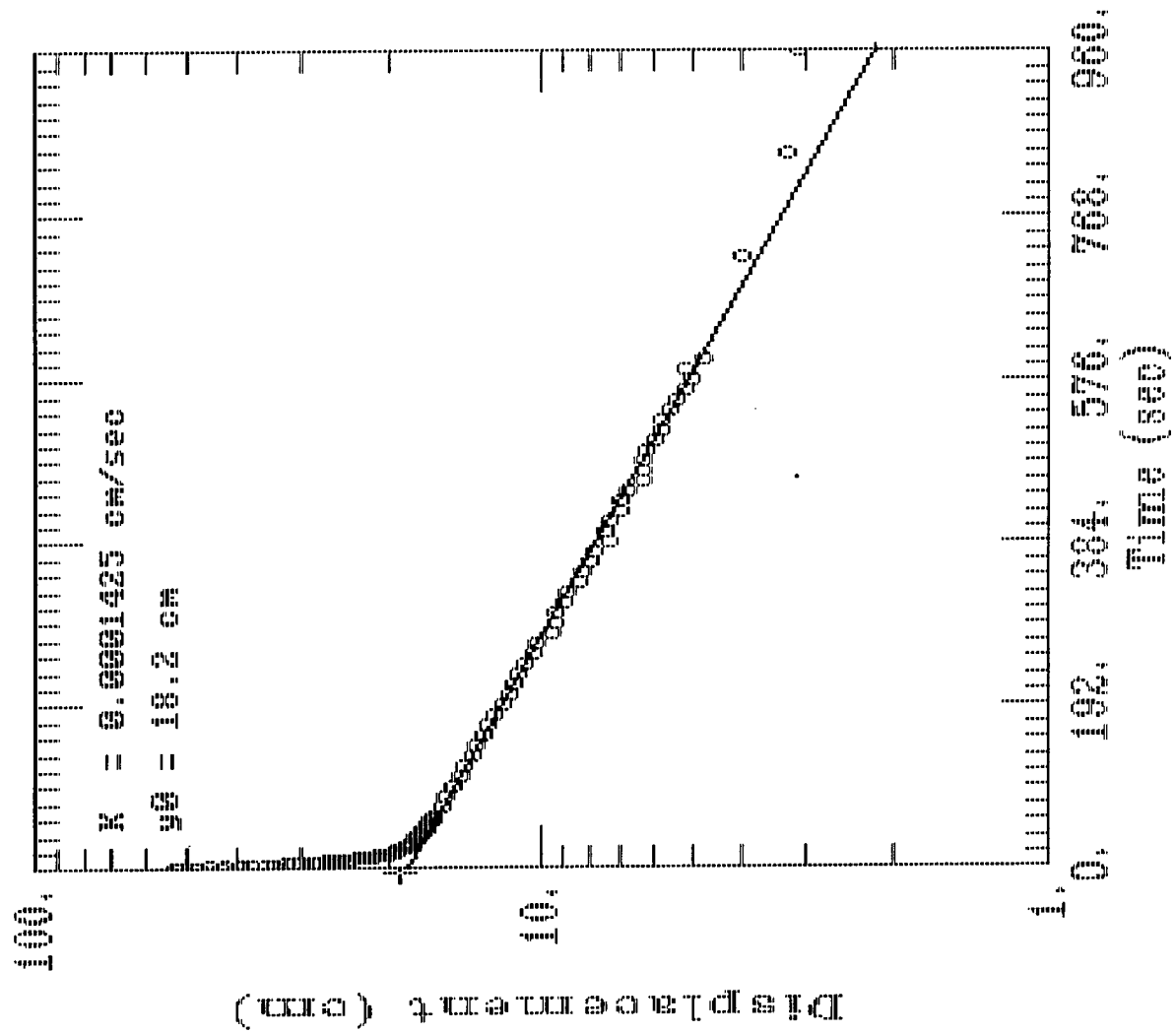
G6M-94-17A PERMEABILITY TESTS



GM-04-17A PERMEABILITY TEST #1



GM-94-17A PERMEABILITY TEST #2



G6M-94-17A PERMEABILITY TESTING

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 4 FT, BORING DIAMETER = 0.833 FT

TEST #1 FALLING HEAD

MINUTES	FEET
0	0
0.0083	0
0.0166	-0.006
0.025	-0.006
0.0333	-0.006
0.0416	0
0.05	-0.006
0.0583	0
0.0666	-0.006
0.075	-0.006
0.0833	0
0.0916	0
0.1	0
0.1083	0
0.1166	0
0.125	0
0.1333	0
0.1416	0
0.15	0
0.1583	0
0.1666	-0.006
0.175	-0.006
0.1833	0
0.1916	0
0.2	0.587
0.2083	0.556
0.2166	0.992
0.225	1.295
0.2333	0.783
0.2416	1.187
0.25	0.947
0.2583	0.802
0.2666	0.537
0.275	1.131
0.2833	1.086
0.2916	1.061
0.3	0.65
0.3083	0.612
0.3166	0.606
0.325	0.6
0.3333	0.6
0.35	0.593
0.3666	0.587
0.3833	0.581
0.4	0.581
0.4166	0.575
0.4333	0.568
0.45	0.568
0.4666	0.562
0.4833	0.562
0.5	0.556
0.5166	0.511
0.5333	0.751
0.55	0.549
0.5666	0.543
0.5833	0.543
0.6	0.537
0.6166	0.537
0.6333	0.53
0.65	0.53
0.6666	0.53
0.6833	0.524
0.7	0.524
0.7166	0.518
0.7333	0.518
0.75	0.511
0.7666	0.511
0.7833	0.511

TEST #2 RISING HEAD

MINUTES	FEET
0	0.145
0.0083	1.567
0.0166	1.731
0.025	1.402
0.0333	1.573
0.0416	1.586
0.05	1.478
0.0583	1.377
0.0666	1.282
0.075	1.213
0.0833	1.15
0.0916	1.093
0.1	1.048
0.1083	1.004
0.1166	0.973
0.125	0.935
0.1333	0.909
0.1416	0.89
0.15	0.872
0.1583	0.853
0.1666	0.834
0.175	0.815
0.1833	0.796
0.1916	0.777
0.2	0.758
0.2083	0.745
0.2166	0.733
0.225	0.72
0.2333	0.707
0.2416	0.701
0.25	0.688
0.2583	0.682
0.2666	0.676
0.275	0.669
0.2833	0.663
0.2916	0.657
0.3	0.65
0.3083	0.644
0.3166	0.644
0.325	0.638
0.3333	0.638
0.35	0.631
0.3666	0.625
0.3833	0.619
0.4	0.612
0.4166	0.606
0.4333	0.606
0.45	0.6
0.4666	0.593
0.4833	0.593
0.5	0.587
0.5166	0.587
0.5333	0.587
0.55	0.581
0.5666	0.581
0.5833	0.581
0.6	0.581
0.6166	0.575
0.6333	0.575
0.65	0.575
0.6666	0.568
0.6833	0.568
0.7	0.562
0.7166	0.562
0.7333	0.562
0.75	0.562
0.7666	0.556
0.7833	0.556

G6M-94-17A PERMEABILITY TESTING

WELL DIAMETER = 0.333 FT, SATURATED SCREEN LENGTH = 4 FT, BORING DIAMETER = 0.833 FT

TEST #1 FALLING HEAD	
MINUTES	FEET
0.8	0.511
0.8166	0.505
0.8333	0.505
0.85	0.499
0.8666	0.499
0.8833	0.499
0.9	0.499
0.9166	0.492
0.9333	0.492
0.95	0.492
0.9666	0.486
0.9833	0.486
1	0.486
1.2	0.467
1.4	0.448
1.6	0.436
1.8	0.423
2	0.41
2.2	0.391
2.4	0.385
2.6	0.372
2.8	0.36
3	0.353
3.2	0.341
3.4	0.334
3.6	0.322
3.8	0.315
4	0.309
4.2	0.296
4.4	0.29
4.6	0.284
4.8	0.271
5	0.265
5.2	0.259
5.4	0.252
5.6	0.246
5.8	0.24
6	0.233
6.2	0.227
6.4	0.221
6.6	0.214
6.8	0.208
7	0.208
7.2	0.202
7.4	0.195
7.6	0.195
7.8	0.183
8	0.183
8.2	0.176
8.4	0.176
8.6	0.17
8.8	0.17
9	0.164
9.2	0.157
9.4	0.157
9.6	0.151
9.8	0.145
10	0.145
12	0.107
14	0.088
16	0.063

TEST #2 RISING HEAD	
MINUTES	FEET
0.8	0.556
0.8166	0.556
0.8333	0.549
0.85	0.549
0.8666	0.549
0.8833	0.549
0.9	0.543
0.9166	0.543
0.9333	0.543
0.95	0.543
0.9666	0.543
0.9833	0.537
1	0.537
1.2	0.518
1.4	0.505
1.6	0.486
1.8	0.473
2	0.461
2.2	0.448
2.4	0.442
2.6	0.429
2.8	0.417
3	0.404
3.2	0.391
3.4	0.379
3.6	0.372
3.8	0.366
4	0.353
4.2	0.341
4.4	0.334
4.6	0.315
4.8	0.309
5	0.309
5.2	0.296
5.4	0.29
5.6	0.278
5.8	0.271
6	0.265
6.2	0.259
6.4	0.24
6.6	0.246
6.8	0.24
7	0.227
7.2	0.227
7.4	0.221
7.6	0.208
7.8	0.208
8	0.208
8.2	0.202
8.4	0.195
8.6	0.189
8.8	0.189
9	0.183
9.2	0.176
9.4	0.17
9.6	0.164
9.8	0.17
10	0.157
12	0.132
14	0.107
16	0.101

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 2

SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-94-17A	B. Schoonard
DATE OF TEST	3/22/95	m. Lounsbury
TYPE OF TEST	Falling Head	
HERMIT TYPE/SERIAL#	SE 2000/M2K-121	
TEST #	2	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	
STATIC WATER LEVEL (FT./TOC)	40.2	
WELL DEPTH (FT./TOC)	44' +/-	
XD DEPTH (FT.TOC)	44	
INITIAL XD REFERENCE	Set at 0	
SLUG DEPTH (FT./TOC)	44	
TIME OF SLUG PLACEMENT	0951	
TIME OF WL EQUILIBRATION	1008	I 0.063 SUR XD
NEW XD REFERENCE	NA	
START TIME OF TEST	0951	
END TIME OF TEST	1008	I 0.063 SUR XD
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

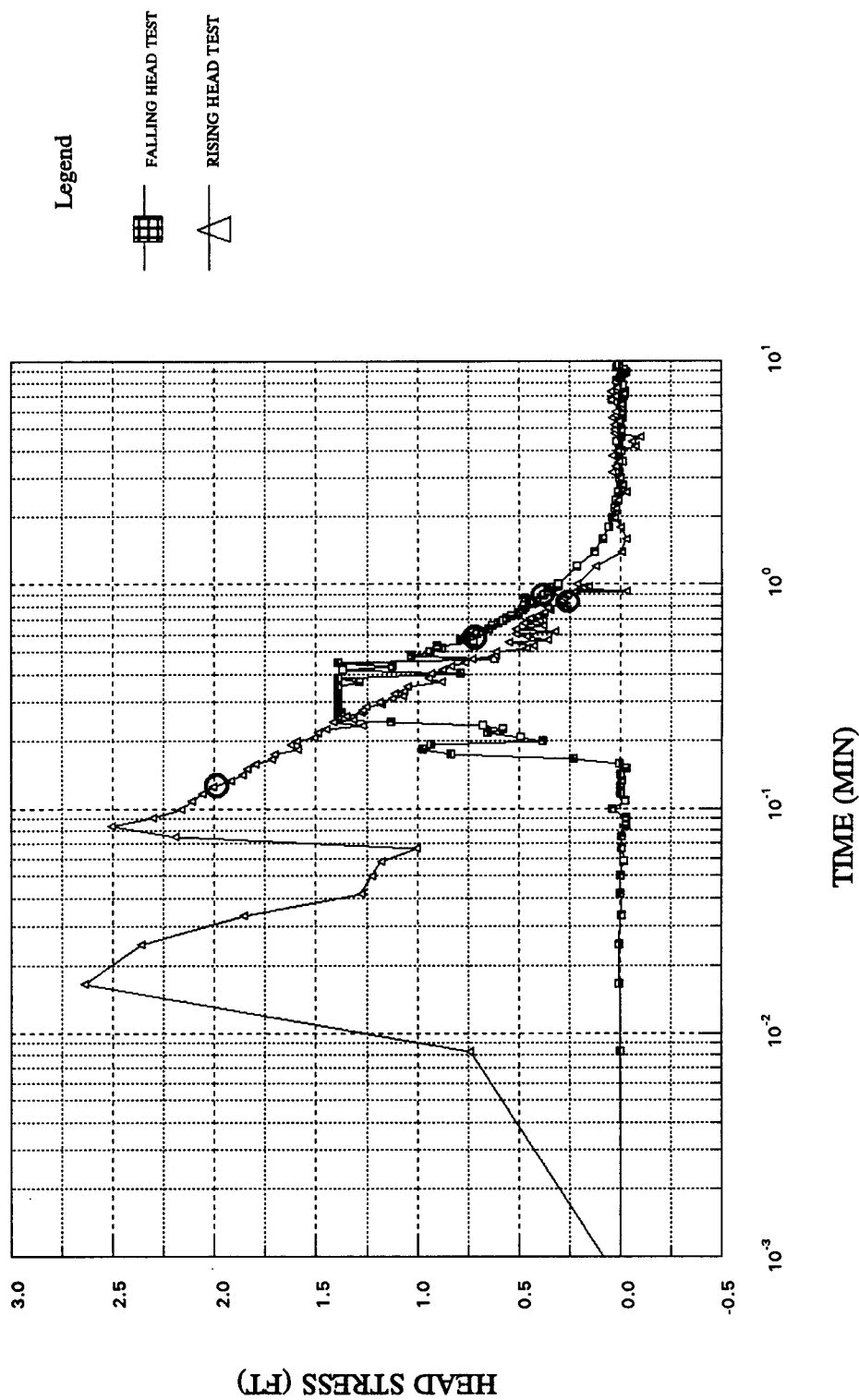
AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 3

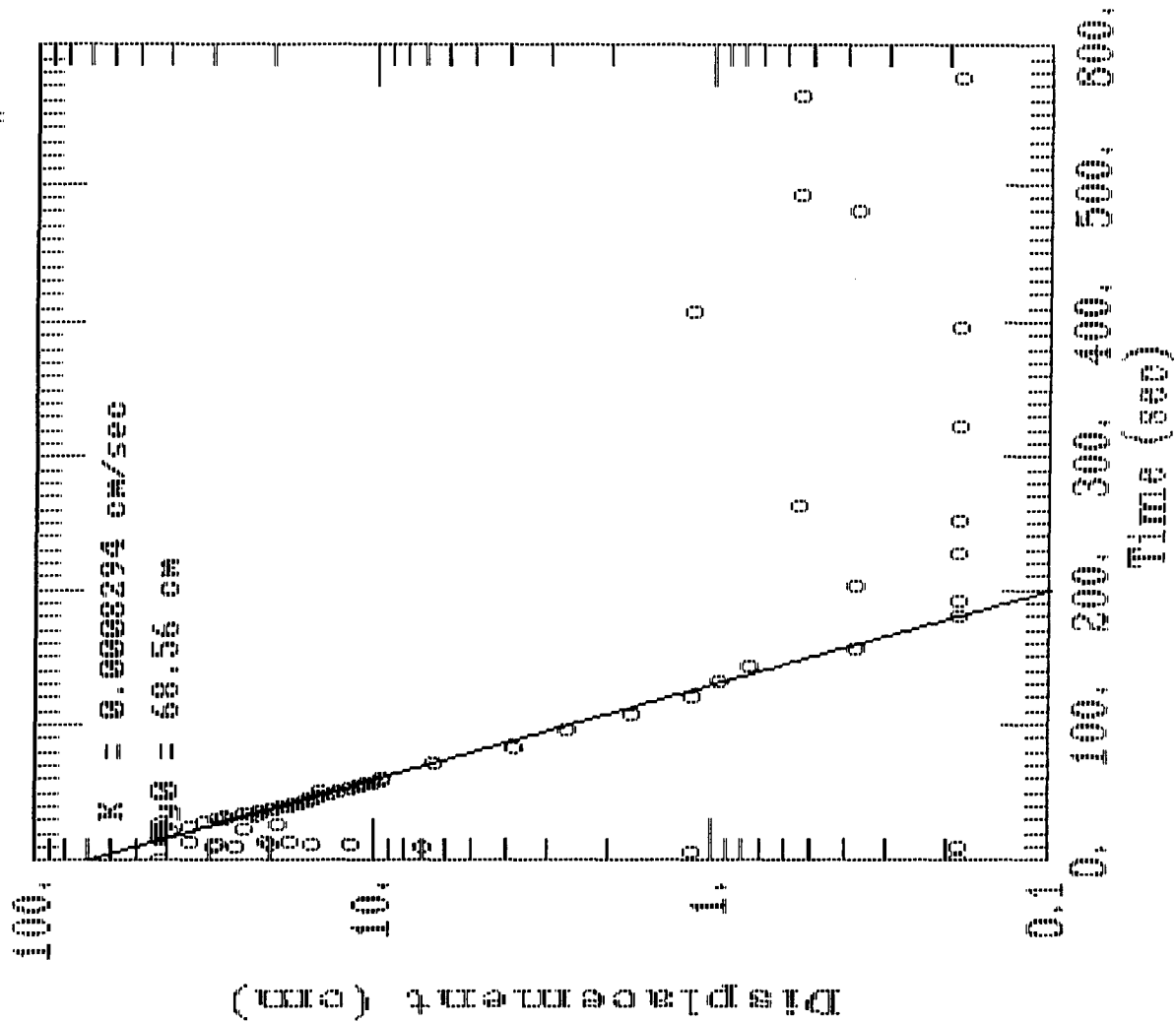
SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-94-17A	B. Schoonard M. Lounsbury
DATE OF TEST	3/22/95	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE 2000/2K-121	
TEST #	3	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	40.2	
WELL DEPTH (FT./TOC)	44' +/-	
XD DEPTH (FT./TOC)	44'	
INITIAL XD REFERENCE	Set at 0	
SLUG DEPTH (FT./TOC)	295 + 44	
TIME OF SLUG PLACEMENT	0951	
TIME OF WL EQUILIBRATION	1008	± 0.063 SUR XD
NEW XD REFERENCE	NA	
START TIME OF TEST	1010	
END TIME OF TEST	1028	± 0.101 TOC x D
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

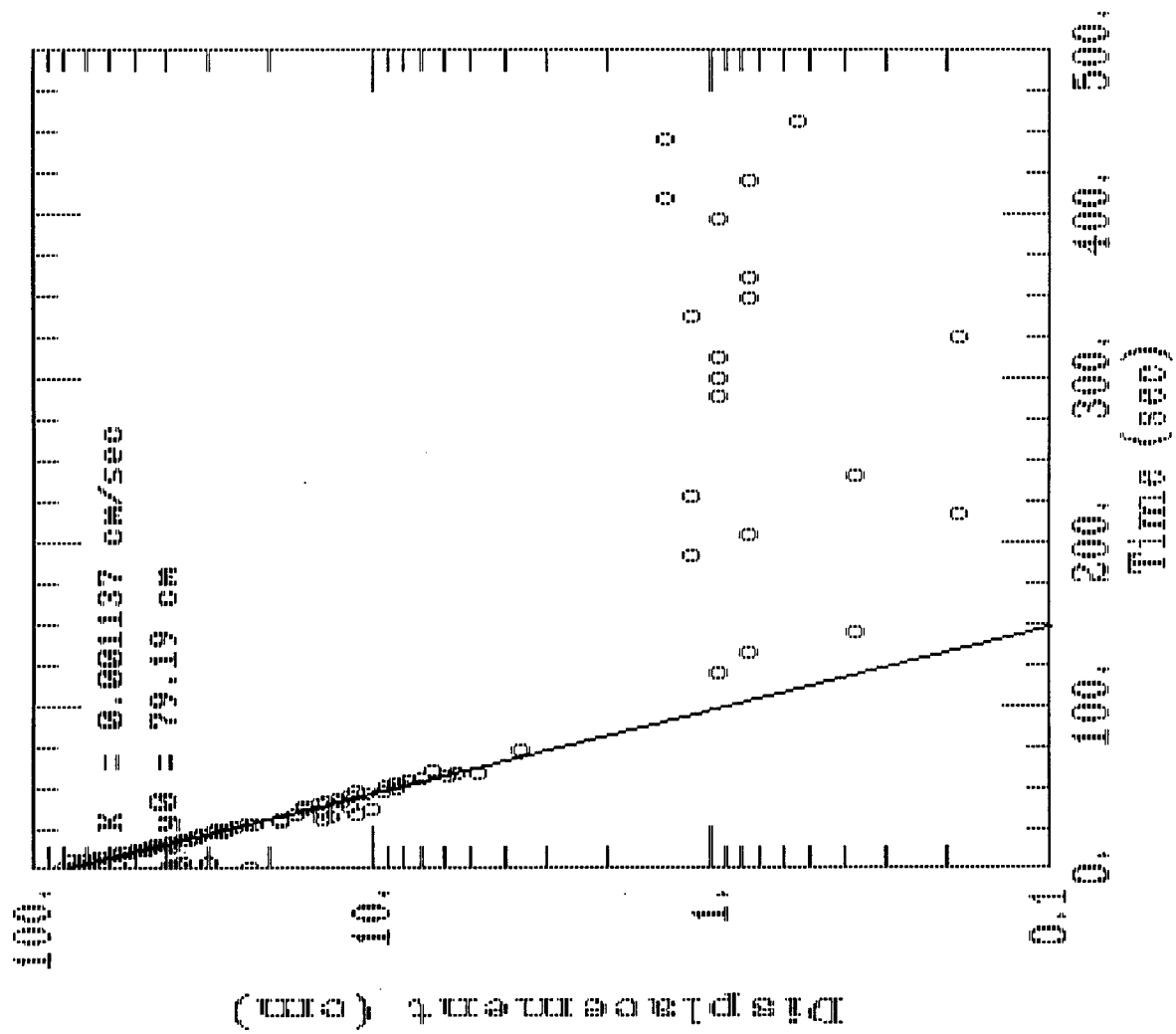
G6M-94-19X PERMEABILITY TESTS



60M-85-18X PERMEABILITY TEST #1



COM-05-10% PERMAQUITY TEST #2



G6M-95-19X PERMEABILITY TESTING

WELL DIAMETER = 0.166 FT, SATURATED SCREEN LENGTH = 16 FT (INCL. SANDPACK), BORING DIAMETER = 0.25 FT,
HIEGHT OF WATER IN WELL = 46 FT

TEST #1

FALLING HEAD

MINUTES	FEET
0	0
0.0083	0
0.0166	0.006
0.025	0.006
0.0333	-0.006
0.0416	0
0.05	0
0.0583	-0.018
0.0666	-0.006
0.075	-0.006
0.0833	-0.031
0.0916	-0.031
0.1	0.037
0.1083	-0.025
0.1166	0
0.125	0
0.1333	-0.006
0.1416	0
0.15	-0.031
0.1583	0.006
0.1666	0.233
0.175	0.834
0.1833	0.973
0.1916	0.935
0.2	0.385
0.2083	0.492
0.2166	0.657
0.225	0.581
0.2333	0.676
0.2416	1.131
0.25	1.39
0.2583	1.39
0.2666	1.377
0.275	1.39
0.2833	1.39
0.2916	1.39
0.3	1.39
0.3083	1.39
0.3166	1.39
0.325	1.39
0.3333	1.39
0.35	1.39
0.3666	1.289
0.3833	1.39
0.4	0.789
0.4166	1.371
0.4333	1.124
0.45	1.39
0.4666	0.619
0.4833	1.03
0.5	0.941
0.5166	0.884
0.5333	0.903
0.55	0.726
0.5666	0.789
0.5833	0.745
0.6	0.707
0.6166	0.682
0.6333	0.65
0.65	0.631
0.6666	0.6
0.6833	0.581
0.7	0.562
0.7166	0.537
0.7333	0.505
0.75	0.505
0.7666	0.48
0.7833	0.467

TEST #2

RIISING HEAD

MINUTES	FEET
0	-0.006
0.0083	0.745
0.0166	2.641
0.025	2.363
0.0333	1.857
0.0416	1.276
0.05	1.225
0.0583	1.175
0.0666	1.004
0.075	2.192
0.0833	2.508
0.0916	2.306
0.1	2.167
0.1083	2.11
0.1166	2.06
0.125	2.009
0.1333	1.92
0.1416	1.864
0.15	1.838
0.1583	1.8
0.1666	1.718
0.175	1.706
0.1833	1.592
0.1916	1.623
0.2	1.598
0.2083	1.51
0.2166	1.491
0.225	1.453
0.2333	1.27
0.2416	1.415
0.25	1.314
0.2583	1.352
0.2666	1.276
0.275	1.27
0.2833	1.251
0.2916	1.175
0.3	1.187
0.3083	1.124
0.3166	1.074
0.325	1.112
0.3333	1.067
0.35	1.048
0.3666	0.884
0.3833	0.947
0.4	0.935
0.4166	0.878
0.4333	0.834
0.45	0.764
0.4666	0.733
0.4833	0.612
0.5	0.612
0.5166	0.461
0.5333	0.429
0.55	0.549
0.5666	0.36
0.5833	0.461
0.6	0.518
0.6166	0.322
0.6333	0.518
0.65	0.385
0.6666	0.473
0.6833	0.398
0.7	0.448
0.7166	0.41
0.7333	0.385
0.75	0.379
0.7666	0.347
0.7833	0.36

G6M-95-19X PERMEABILITY TESTING

WELL DIAMETER = 0.166 FT, SATURATED SCREEN LENGTH = 16 FT (INCL. SANDPACK), BORING DIAMETER = 0.25 FT,
 HIEGHT OF WATER IN WELL = 46 FT

TEST #1

FALLING HEAD	
MINUTES	FEET
0.8	0.473
0.8166	0.436
0.8333	0.429
0.85	0.41
0.8666	0.467
0.8833	0.385
0.9	0.379
<hr/>	
0.9166	0.36
0.9333	0.353
0.95	0.341
0.9666	0.328
0.9833	0.309
1	0.309
1.2	0.214
1.4	0.126
1.6	0.088
1.8	0.056
2	0.037
2.2	0.031
2.4	0.025
2.6	0.012
2.8	0
3	0.006
3.2	0.006
3.4	0.012
3.6	-0.012
3.8	0.006
4	-0.006
4.2	0.006
4.4	0.018
4.6	-0.006
4.8	0
5	-0.006
5.2	0
5.4	0.006
5.6	-0.012
5.8	-0.006
6	-0.006
6.2	0
6.4	-0.012
6.6	0.006
6.8	0.037
7	-0.018
7.2	-0.025
7.4	-0.025
7.6	-0.012
7.8	-0.012
8	0.012
8.2	0.018
8.4	0
8.6	-0.006
8.8	-0.018
9	-0.031
9.2	-0.018
9.4	0.018
9.6	0.006

TEST #2

RISING HEAD	
MINUTES	FEET
0.8	0.303
0.8166	0.278
0.8333	0.278
0.85	0.29
0.8666	0.278
0.8833	0.271
0.9	0.259
0.9166	0.233
0.9333	-0.031
0.95	0.195
0.9666	0.183
0.9833	0.157
1	0.214
1.2	0.12
1.4	-0.006
1.6	-0.031
1.8	0
2	0.031
2.2	0.025
2.4	0.012
2.6	-0.031
2.8	-0.012
3	0
3.2	0.037
3.4	0.025
3.6	0.006
3.8	0.037
4	0.012
4.2	-0.075
4.4	-0.056
4.6	-0.101
4.8	0.031
5	0.031
5.2	0.031
5.4	0.006
5.6	0.037
5.8	0.025
6	0.025
6.2	-0.012
6.4	-0.006
6.6	0.031
6.8	0.044
7	0.025
7.2	-0.018
7.4	0.044
7.6	0.018

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 6

SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-95-19x	B. Schoonard M. Lansbury
DATE OF TEST	11/3/21/95	
TYPE OF TEST	Falling Head	
HERMIT TYPE/SERIAL #	SE 2000/2K-121	
TEST #	6	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	
STATIC WATER LEVEL (FT./TOC)	13'	
WELL DEPTH (FT./TOC)	584' +/-	
XD DEPTH (FT./TOC)	58	
INITIAL XD REFERENCE	Set at 0	
SLUG DEPTH (FT./TOC)	~ 16'	
TIME OF SLUG PLACEMENT	11:46	
TIME OF WL EQUILIBRATION	11:54	$\frac{1}{2} - 0.012? \times D$ SUR
NEW XD REFERENCE	NA	
START TIME OF TEST	11:46	
END TIME OF TEST	11:54	$\frac{1}{2} - 0.012? \times D$ SUR
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 7

SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-95-19X	B. Schoonard M. Lounsbury
DATE OF TEST	3/21/95	
TYPE OF TEST	Rising Head	
HERMIT TYPE/SERIAL#	SE 2000/2K-121	
TEST #	7	
DATA COLLECTION RATE	Log 2	
TRANSDUCER		
SERIAL #	5454	
PSIG	20	
SCALE FACTOR	19.993	
OFFSET	0.088	
INPUT CHANNEL	1	
TEST DATA		
INPUT MODE (TOC/SUR)	TOC	
STATIC WATER LEVEL (FT./TOC)	12'	
WELL DEPTH (FT./TOC)	58' +/-	
XD DEPTH (FT./TOC)	58'	
INITIAL XD REFERENCE	Set at 0	
SLUG DEPTH (FT./TOC)	~ 16'	
TIME OF SLUG PLACEMENT	11:46	
TIME OF WL EQUILIBRATION	11:54	$\frac{1}{2}$ - 0.012? xD SUR
NEW XD REFERENCE	NA	
START TIME OF TEST	1157	
END TIME OF TEST	1204	$\frac{1}{2}$ 0.025 xD TOC
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

CALCULATION OF HYDRAULIC CONDUCTIVITIES USING THE HVORSLEV EQUATION
GROUP 3 WELLS

$$K = -[(\log Ht1 - \log Ht2)/(t1 - t2)] \{[(r) \wedge 2 \log (L/R)]/2L\}$$

WHERE:

t1 = TIME 1 (MINUTES)

t2 = TIME 2 (MINUTES)

Ht1 = HEAD STRESS AT TIME 1 (FEET)

Ht2 = HEAD STRESS AT TIME 2 (FEET)

r = RADIUS OF WELL CASING (FEET)

R = RADIUS OF BOREHOLE (FEET)

L = EFFECTIVE SATURATED LENGTH OF SCREEN (FEET)

WELL	t1	t2	Ht1	Ht2	r	R	L	TEST #	K (FT/MIN)	K (CM/SEC)
G6M-94-15A	3	10	0.543	0.35	0.167	0.417	4.8	1	8.4E-05	4.3E-05
G6M-94-15A	2	8	0.552	0.091	0.167	0.417	4.8	2	4.0E-04	2.0E-04
G6M-94-16X	3	10	0.208	0.094	0.167	0.417	6	1	1.3E-04	6.7E-05
G6M-94-16X	3	10	0.214	0.094	0.167	0.417	6	2	1.4E-04	7.0E-05
G6M-94-17A	3.6	10	0.322	0.145	0.167	0.417	4	1	1.9E-04	9.4E-05
G6M-94-17A	3	10	0.404	0.157	0.167	0.417	4	2	2.0E-04	1.0E-04
G6M-95-19X	0.6	0.9	0.707	0.379	0.083	0.125	16	1	4.1E-04	2.1E-04
G6M-95-19X	0.125	0.82	2.009	0.278	0.083	0.125	16	2	5.6E-04	2.8E-04

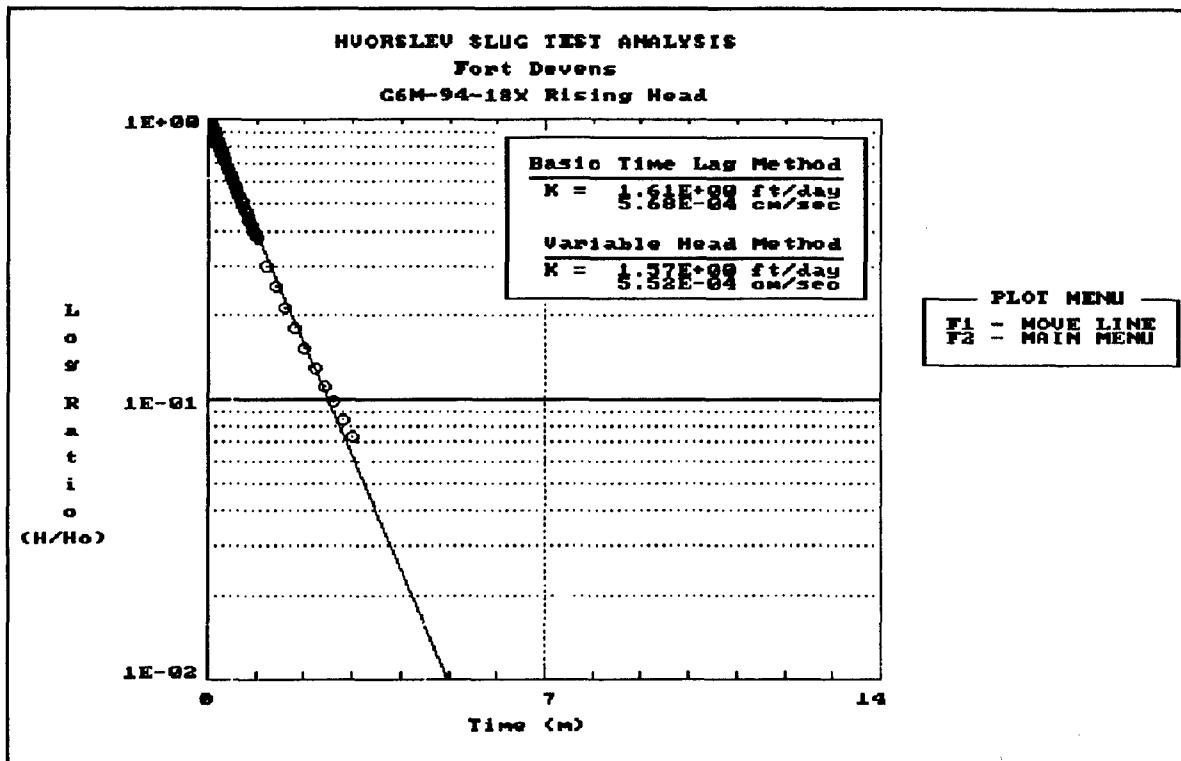
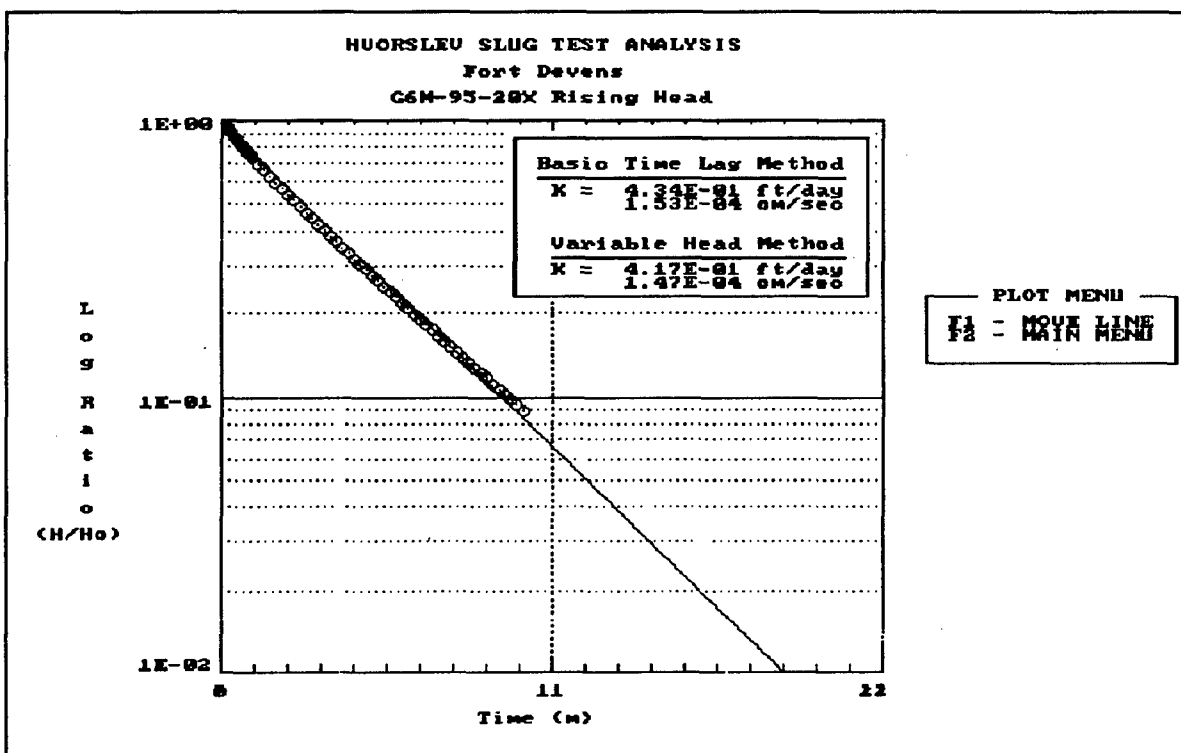


Figure 1



Fort Devens
G6M-94-18X Rising Head
R. Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 1.61E+00 ft/day
5.68E-04 cm/sec
Basic Time Lag: 1.06 m
2.3 Times Basic Time Lag: 2.44 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 1.57E+00 ft/day
5.52E-04 cm/sec
Time Coordinate T1: 0.5 m
Time Coordinate T2: 4.5 m
Head Ratio Coordinate H1: 61.87E-02
Head Ratio Coordinate H2: 15.81E-03

Well/Aquifer Parameters

Length of well screen: 10.00 ft
Diameter of the well casing: 0.167 ft
Diameter of the well bore: 0.670 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
1	0.0033	1.000	2	0.0066	0.997	3	0.0100	0.993
4	0.0133	0.990	5	0.0166	0.986	6	0.0200	0.983
7	0.0233	0.979	8	0.0266	0.976	9	0.0300	0.972
10	0.0333	0.969	11	0.0366	0.966	12	0.0400	0.962
13	0.0433	0.959	14	0.0466	0.956	15	0.0500	0.952
16	0.0533	0.949	17	0.0566	0.946	18	0.0600	0.944
19	0.0633	0.939	20	0.0666	0.936	21	0.0700	0.934
22	0.0733	0.931	23	0.0766	0.927	24	0.0800	0.924
25	0.0833	0.921	26	0.0866	0.918	27	0.0900	0.914
28	0.0933	0.911	29	0.0966	0.908	30	0.1000	0.905
31	0.1033	0.902	32	0.1066	0.898	33	0.1100	0.895
34	0.1133	0.892	35	0.1166	0.890	36	0.1200	0.887
37	0.1233	0.883	38	0.1266	0.881	39	0.1300	0.877
40	0.1333	0.875	41	0.1366	0.871	42	0.1400	0.868
43	0.1433	0.866	44	0.1466	0.863	45	0.1500	0.860
46	0.1533	0.857	47	0.1566	0.854	48	0.1600	0.851
49	0.1633	0.849	50	0.1666	0.846	51	0.1700	0.843
52	0.1733	0.840	53	0.1766	0.837	54	0.1800	0.834
55	0.1833	0.832	56	0.1866	0.829	57	0.1900	0.826
58	0.1933	0.823	59	0.1966	0.822	60	0.2000	0.819
61	0.2033	0.816	62	0.2066	0.813	63	0.2100	0.810

64	0.2133	0.807	65	0.2166	0.805	66	0.2200	0.802
67	0.2233	0.800	68	0.2266	0.797	69	0.2300	0.795
70	0.2333	0.792	71	0.2366	0.789	72	0.2400	0.786
73	0.2433	0.785	74	0.2466	0.782	75	0.2500	0.779
76	0.2533	0.776	77	0.2566	0.775	78	0.2600	0.772
79	0.2633	0.769	80	0.2666	0.767	81	0.2700	0.765
82	0.2733	0.762	83	0.2766	0.759	84	0.2800	0.758
85	0.2833	0.755	86	0.2866	0.754	87	0.2900	0.750
88	0.2933	0.748	89	0.2966	0.745	90	0.3000	0.744
91	0.3033	0.741	92	0.3066	0.739	93	0.3100	0.737
94	0.3133	0.734	95	0.3166	0.731	96	0.3200	0.729
97	0.3233	0.727	98	0.3266	0.725	99	0.3300	0.723
100	0.3333	0.720	101	0.3500	0.708	102	0.3666	0.695
103	0.3833	0.684	104	0.4000	0.673	105	0.4166	0.660
106	0.4333	0.650	107	0.4500	0.639	108	0.4666	0.629
109	0.4833	0.617	110	0.5000	0.608	111	0.5166	0.598
112	0.5333	0.586	113	0.5500	0.578	114	0.5666	0.568
115	0.5833	0.560	116	0.6000	0.551	117	0.6166	0.541
118	0.6333	0.534	119	0.6500	0.524	120	0.6666	0.517
121	0.6833	0.507	122	0.7000	0.500	123	0.7166	0.491
124	0.7333	0.484	125	0.7500	0.476	126	0.7666	0.469
127	0.7833	0.462	128	0.8000	0.453	129	0.8166	0.448
130	0.8333	0.440	131	0.8500	0.433	132	0.8666	0.426
133	0.8833	0.419	134	0.9000	0.414	135	0.9166	0.406
136	0.9333	0.401	137	0.9500	0.395	138	0.9666	0.389
139	0.9833	0.382	140	1.0000	0.378	141	1.2000	0.300
142	1.4000	0.252	143	1.6000	0.211	144	1.8000	0.178
145	2.0000	0.151	146	2.2000	0.129	147	2.4000	0.112
148	2.6000	0.098	149	2.8000	0.085	150	3.0000	0.073
151	3.2000	0.065	152	3.4000	0.059	153	3.6000	0.052
154	3.8000	0.048	155	4.0000	0.044	156	4.2000	0.041
157	4.4000	0.037	158	4.6000	0.034	159	4.8000	0.032
160	5.0000	0.031	161	5.2000	0.030	162	5.4000	0.027
163	5.6000	0.027	164	5.8000	0.025	165	6.0000	0.024
166	6.2000	0.022	167	6.4000	0.022	168	6.6000	0.022
169	6.8000	0.021	170	7.0000	0.021	171	7.2000	0.020
172	7.4000	0.020	173	7.6000	0.020	174	7.8000	0.018
175	8.0000	0.018	176	8.2000	0.018	177	8.4000	0.017
178	8.6000	0.017	179	8.8000	0.017	180	9.0000	0.017
181	9.2000	0.017	182	9.4000	0.017	183	9.6000	0.017
184	9.8000	0.015	185	10.0000	0.015	186	12.0000	0.013
187	14.0000	0.011						

Fort Devens
G6M-95-20X Rising Head
R. Johnson

Results

Basic Time Lag-

Hydraulic Conductivity (Kh): 4.34E-01 ft/day
1.53E-04 cm/sec
Basic Time Lag: 3.93 m
2.3 Times Basic Time Lag: 9.04 m
(Equalization Ratio \approx 0.90)

Variable Head-

Hydraulic Conductivity (Kh): 4.17E-01 ft/day
1.47E-04 cm/sec
Time Coordinate T1: 1.9 m
Time Coordinate T2: 16.8 m
Head Ratio Coordinate H1: 61.32E-02
Head Ratio Coordinate H2: 15.80E-03

Well/Aquifer Parameters

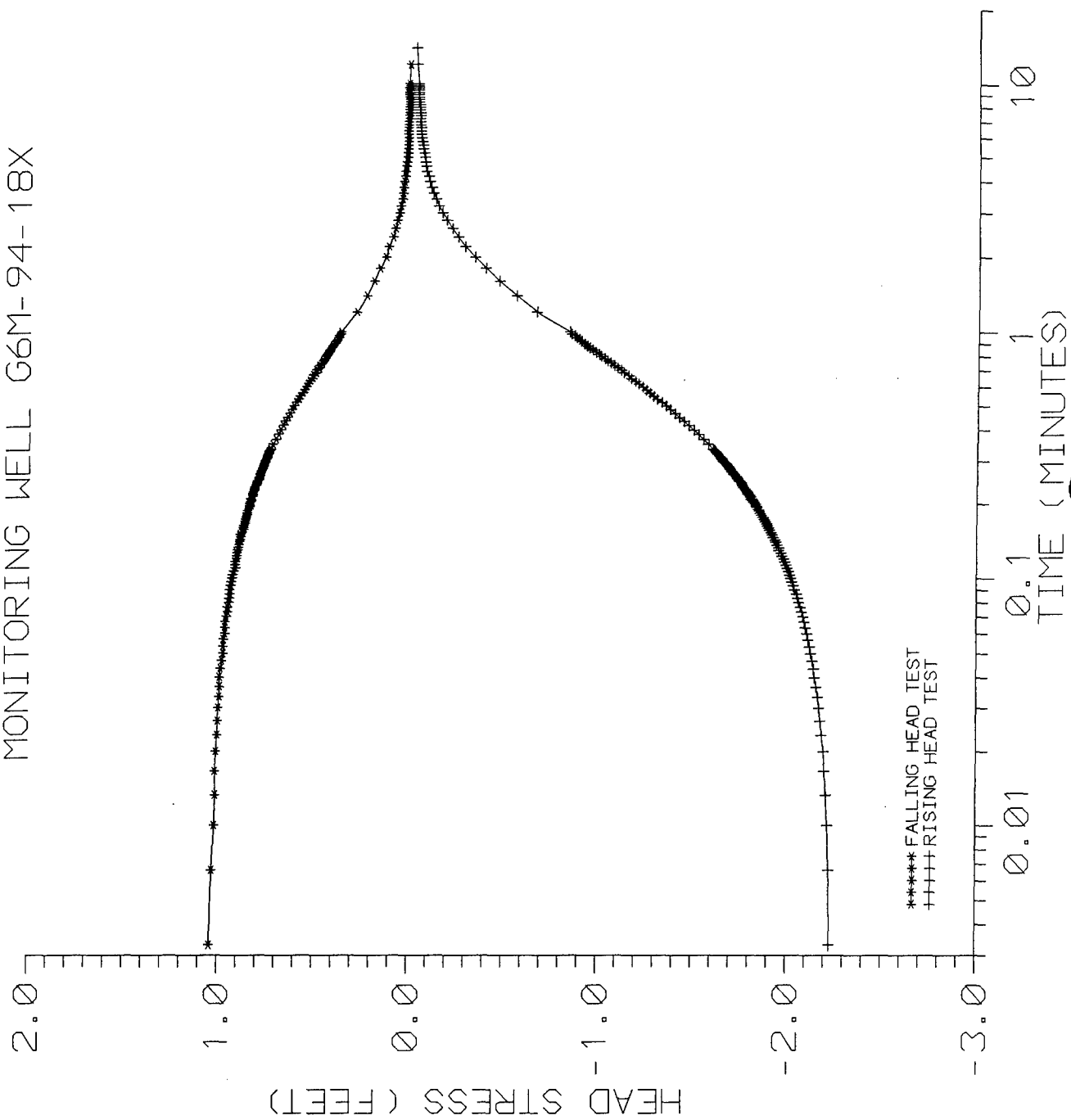
Length of well screen: 10.00 ft
Diameter of the well casing: 0.167 ft
Diameter of the well bore: 0.670 ft
Kh/Kv ratio: 1.0

Time vs Drawdown Ratio Data

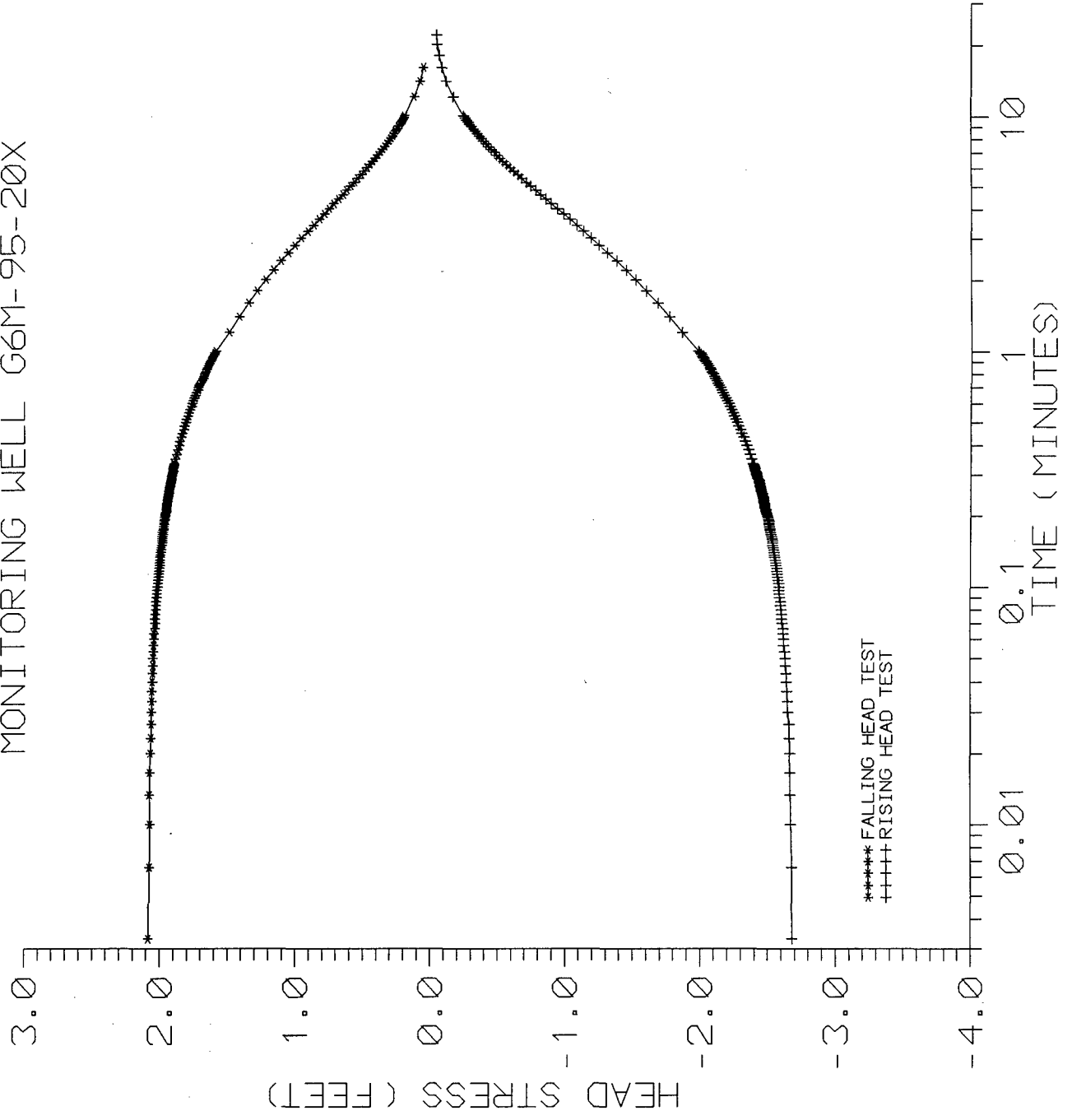
No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)	No.	Time (m)	H/Hmax (ft)
1	0.0033	1.000	2	0.0066	0.999	3	0.0100	0.996
4	0.0133	0.995	5	0.0166	0.994	6	0.0200	0.993
7	0.0233	0.992	8	0.0266	0.991	9	0.0300	0.988
10	0.0333	0.987	11	0.0366	0.986	12	0.0400	0.985
13	0.0433	0.984	14	0.0466	0.982	15	0.0500	0.981
16	0.0533	0.980	17	0.0566	0.978	18	0.0600	0.978
19	0.0633	0.975	20	0.0666	0.975	21	0.0700	0.973
22	0.0733	0.972	23	0.0766	0.972	24	0.0800	0.969
25	0.0833	0.968	26	0.0866	0.968	27	0.0900	0.966
28	0.0933	0.965	29	0.0966	0.963	30	0.1000	0.962
31	0.1033	0.962	32	0.1066	0.960	33	0.1100	0.959
34	0.1133	0.959	35	0.1166	0.956	36	0.1200	0.956
37	0.1233	0.954	38	0.1266	0.954	39	0.1300	0.953
40	0.1333	0.952	41	0.1366	0.950	42	0.1400	0.949
43	0.1433	0.948	44	0.1466	0.947	45	0.1500	0.946
46	0.1533	0.944	47	0.1566	0.944	48	0.1600	0.943
49	0.1633	0.942	50	0.1666	0.941	51	0.1700	0.940
52	0.1733	0.938	53	0.1766	0.937	54	0.1800	0.936
55	0.1833	0.935	56	0.1866	0.934	57	0.1900	0.934
58	0.1933	0.933	59	0.1966	0.931	60	0.2000	0.930
61	0.2033	0.929	62	0.2066	0.928	63	0.2100	0.927

64	0.2133	0.927	65	0.2166	0.924	66	0.2200	0.924
67	0.2233	0.923	68	0.2266	0.922	69	0.2300	0.921
70	0.2333	0.921	71	0.2366	0.920	72	0.2400	0.919
73	0.2433	0.918	74	0.2466	0.916	75	0.2500	0.916
76	0.2533	0.914	77	0.2566	0.914	78	0.2600	0.913
79	0.2633	0.912	80	0.2666	0.910	81	0.2700	0.910
82	0.2733	0.909	83	0.2766	0.908	84	0.2800	0.907
85	0.2833	0.907	86	0.2866	0.906	87	0.2900	0.903
88	0.2933	0.903	89	0.2966	0.902	90	0.3000	0.901
91	0.3033	0.901	92	0.3066	0.900	93	0.3100	0.899
94	0.3133	0.897	95	0.3166	0.896	96	0.3200	0.896
97	0.3233	0.895	98	0.3266	0.895	99	0.3300	0.894
100	0.3333	0.891	101	0.3500	0.888	102	0.3666	0.883
103	0.3833	0.878	104	0.4000	0.874	105	0.4166	0.869
106	0.4333	0.865	107	0.4500	0.860	108	0.4666	0.857
109	0.4833	0.851	110	0.5000	0.848	111	0.5166	0.843
112	0.5333	0.840	113	0.5500	0.836	114	0.5666	0.831
115	0.5833	0.828	116	0.6000	0.824	117	0.6166	0.819
118	0.6333	0.816	119	0.6500	0.812	120	0.6666	0.808
121	0.6833	0.804	122	0.7000	0.802	123	0.7166	0.797
124	0.7333	0.793	125	0.7500	0.790	126	0.7666	0.786
127	0.7833	0.783	128	0.8000	0.779	129	0.8166	0.776
130	0.8333	0.772	131	0.8500	0.770	132	0.8666	0.767
133	0.8833	0.763	134	0.9000	0.759	135	0.9166	0.756
136	0.9333	0.752	137	0.9500	0.750	138	0.9666	0.746
139	0.9833	0.743	140	1.0000	0.739	141	1.2000	0.695
142	1.4000	0.659	143	1.6000	0.627	144	1.8000	0.595
145	2.0000	0.567	146	2.2000	0.540	147	2.4000	0.514
148	2.6000	0.489	149	2.8000	0.465	150	3.0000	0.443
151	3.2000	0.422	152	3.4000	0.403	153	3.6000	0.384
154	3.8000	0.367	155	4.0000	0.349	156	4.2000	0.332
157	4.4000	0.317	158	4.6000	0.303	159	4.8000	0.289
160	5.0000	0.276	161	5.2000	0.263	162	5.4000	0.251
163	5.6000	0.240	164	5.8000	0.228	165	6.0000	0.218
166	6.2000	0.209	167	6.4000	0.199	168	6.6000	0.189
169	6.8000	0.181	170	7.0000	0.174	171	7.2000	0.166
172	7.4000	0.159	173	7.6000	0.152	174	7.8000	0.145
175	8.0000	0.139	176	8.2000	0.133	177	8.4000	0.127
178	8.6000	0.121	179	8.8000	0.116	180	9.0000	0.112
181	9.2000	0.106	182	9.4000	0.102	183	9.6000	0.097
184	9.8000	0.094	185	10.0000	0.089	186	12.0000	0.060
187	14.0000	0.040	188	16.0000	0.029	189	18.0000	0.021
190	20.0000	0.016	191	22.0000	0.014	192	0.0000	1.000

MONITORING WELL G6M-94-18X



MONITORING WELL G6M-95-20X



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 2/3

SETUP	DATE	BY WHOM
MONITORING WELL ID	G6M-94-18X	R. JOHNSON
DATE OF TEST	3-31-95	3-31-95
TYPE OF TEST	FALLING HEAD	RIISING HEAD
HERMIT TYPE/SERIAL#	SE1000C/1KCO1732	
TEST #	SEL #2	SEL #3
DATA COLLECTION RATE	LOG	"
TRANSDUCER		
SERIAL #	2046 DE	"
PSIG	20	"
SCALE FACTOR	10.003	"
OFFSET	- 0.034	"
INPUT CHANNEL	1	"
TEST DATA	ID 01801	01802
INPUT MODE (TOC/SUR)	EN: SUR	"
STATIC WATER LEVEL (FT./TOC)	14.40 (from steel)	14.40 (from steel)
WELL DEPTH (FT./TOC)		
XD DEPTH (FT./TOC)	Ref 2.00 10.22' head	Ref 2.00 1
INITIAL XD REFERENCE	0.00	0.00
SLUG DEPTH (FT./TOC)	5.00' below $\frac{V}{2}$	OUT
TIME OF SLUG PLACEMENT	0938 (1.04' head)	0954 (-2.24' head)
TIME OF WL EQUILIBRATION	0944	
NEW XD REFERENCE	---	---
START TIME OF TEST	0938	954
END TIME OF TEST	0950 (0.00)	1009 (-0.02)
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. 9/1

SETUP	DATE	BY WHOM
MONITORING WELL ID	66 ^{M-14} -95- 20 ²⁰	R. JOHNSON
DATE OF TEST	3-31-95	3-31-95
TYPE OF TEST	FALLING HEAD	RISING HEAD
HERMIT TYPE/SERIAL#	SE 1000 C / 1KCO1732	"
TEST #	SEL ϕ	SEL 1
DATA COLLECTION RATE	LOG	LOG
TRANSDUCER		
SERIAL #	2046 DE	"
PSIG	20	"
SCALE FACTOR	10.003	"
OFFSET	- 0.034	"
INPUT CHANNEL	1	"
TEST DATA	ID 02001	02002
INPUT MODE (TOC/SUR)	EN: SUR	"
STATIC WATER LEVEL (FT./TOC)	12.49 (from PVC)	12.49 (PVC)
WELL DEPTH (FT./TOC)		
XD DEPTH (FT./TOC)	7.92' head	7.93' head
INITIAL XD REFERENCE	0.00	0.00
SLUG DEPTH (FT./TOC)	5.00' below $\frac{1}{2}$	OUT
TIME OF SLUG PLACEMENT	08:30 (2.08' head)	8:52 (-2.68')
TIME OF WL EQUILIBRATION	08:48	9:15 (-0.04)
NEW XD REFERENCE	---	---
START TIME OF TEST	08:30	8:52
END TIME OF TEST	08:48	9:15
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

APPENDIX B
BORING LOGS AND TEST PIT LOGS

GROUP 3 BORING LOGS

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G3M-92-01X	
CLIENT: AEC		DATE STARTED: 6/29/92			GROUP: 3	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/29/92			PROTECTION: Modified D	
METHOD: 4.25" HSA		BORING DIAMETER: 8"			PID METER: 10.6 eV PM-100	
GROUND ELEV.: 250.7'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 35'	
LOGGED BY: CPL		CHECKED BY: DSP			WATER TABLE BGS: 27.3' (6/29/92)	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.6	0	(0-1.0') SAND, poorly graded, medium to fine with little (5-10%) gravel (up to 1" max), subrounded, medium dense, dry, 10YR4/3 Munsell dark [gray] brown, fill. SP (1.0-1.6') SAND, moderately graded, medium to fine with trace (<5%) gravel, subrounded, medium dense, dry, 10YR3/2 Munsell very dark grayish brown, fill. SP	12/11/15/11	Head space = 0 ppm. Breathing zone LEL=8KG.
S-2	5-7	2.0/1.1	0	(5.0-5.8') SAND, well graded, medium to fine with little (10-15%) coarse sand and gravel, loose, dry to moist, 7.5YR4/2 Munsell dark brown, fill. SW (5.8-6.1') Silty SAND, poorly graded, trace (<5%) coarse sand and gravel, subrounded, loose, dry to moist, 2.5Y8/3 Munsell white to pale yellow, natural soil outwash or kame terrace. SM	8/5/3/4	Head space PID=0 ppm. Breathing zone LEL=8KG.
S-3	10-12	2.0/1.1	0	SAND, moderately graded, medium to fine with trace (<5%) coarse sand, silt, and fine gravel, medium dense, dry to moist, 2.5Y7/2 Munsell light gray [brown], kame terrace or outwash. SP	1/4/7/8	Same as above.
S-4	15-17	2.0/1.2	0	Similar to above. SP	5/8/7/8	Same as above.
S-5	20-22	2.0/1.3	0	Similar to above.. SP	5/7/5/8	Same as above.
S-6	25-27	2.0/2.0	0	(25.0-25.6') Similar to above. SP (25.6-25.8') Sandy SILT, poorly graded, trace (<5%) medium sand, medium dense, moist to WET, 5YR4/2 Munsell dark reddish gray. ML (25.8-27.0') SAND, moderately to poorly graded, fine with trace (<5%) coarse sand and gravel, subrounded, medium dense, Saturated, 10YR6/2 Munsell light brownish gray, some crude to defined stratification, outwash to kame terrace. SP	5/5/6/7	Analytical sample collected. Grain size analysis performed-->SM. Head space PID=0 ppm. Breathing zone LEL=8KG.
S-7	30-32	2.0/2.0	0	Similar to above except loose. SP	3/4/4/4	Head space PID=0 ppm. Breathing zone LEL=8KG.
				BOE at 35'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G3M-92-02X	
CLIENT: AEC		DATE STARTED: 6/30/92		GROUP: 3		
CONTRACTOR: D. L. Maher		DATE COMPLETED: 7/1/92		PROTECTION: Modified D		
METHOD: 6.65" HSA		BORING DIAMETER: 10"		PID METER: 10.6 eV HL-200		
GROUND ELEV.: 249.1'		REFERENCE PT. ELEV.: NA		TOTAL DEPTH: 31'		
LOGGED BY: CPL		CHECKED BY: DSP		WATER TABLE BGS: 25'		
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.5	0	(0-1.5') SAND, poorly graded, medium to fine with trace (<10%) silt and trace to little (5-15%) coarse sand and fine gravel (up to 1.5" max), subrounded, loose, dry, 10YR3/2 Munsell very dark grayish brown. SP	4/4/4/4	Head space PID=>10 ppm, but suspect high ambient humidity resulting in higher than actual VOC readings. Breathing zone LEL=BKG.
S-2	5-7	2.0/1.6	0	(5.0-5.2') Similar to above. SP (5.2-6.6') SAND, poorly graded, medium to fine with trace (<5%) silt and little (15-20%) coarse sand and fine gravel (up to 1" max), subrounded to subangular, medium dense, dry to slightly moist, 2.5Y7/2 Munsell light gray (brown), crude stratification with some fine sandy layers. SP	6/9/10/10	Head space PID=>15 ppm, but suspect high ambient humidity. Breathing zone LEL=BKG.
S-3	10-12	2.0/2.0	0	Similar to bottom of S-2 above except loose. SP	3/4/5/7	Same as above except PID=>25 ppm.
S-4	15-17	2.0/2.0	0	Similar to above except medium dense. SP	4/5/7/10	Same as above except PID=>10 ppm.
S-5	20-22	2.0/2.0	0	Similar to above except loose and moist. SP	3/4/6/6	Same as above except PID=>8 ppm.
S-6	25-27	2.0/1.4	0	SAND, poorly graded, medium to fine with trace (<5%) silt and little (10-20%) coarse sand and fine gravel (up to 1" max), subrounded to subangular, Saturated, 2.5Y4/3 Munsell dk grayish brown, crude stratification to moderately defined stratification with mostly fine sandy layers up to .5" thick. SP	-	Analytical sample collected. Grain size analysis performed-->SP. Head space PID=0 ppm. Breathing zone LEL=BKG.
				BOE at 31'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G3M-92-03X	
CLIENT: AEC		DATE STARTED: 7/1/92			GROUP: 3	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 7/1/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10"			PID METER: 10.6 eV HL-200	
GROUND ELEV.: 249'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 31'	
LOGGED BY: CPL		CHECKED BY: DSP			WATER TABLE BGS: 22.5' (7/1/92)	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.4	0	SAND, poorly graded, medium to fine with trace (<10%) silt and coarse sand or fine gravel (up to 1.5" max), subrounded, loose, dry, 7.5YR4/3 Munsell dark brown, fill. SP	3/4/3/5	Head space PID=0 ppm. Breathing zone LEL=8KG.
S-2	5-7	2.0/1.6	0	SAND, moderately graded, medium to fine with trace (<5%) silt and little (15-20%) coarse sand and fine gravel (up to 1" max), subrounded to subangular, loose, dry to slightly moist, 2.5Y7/2 Munsell light gray [brown], crude to moderately defined fine sandy layers and zones up to 2" thick. SP	3/4/5/5	Head space PID=0 ppm. Breathing zone LEL=8KG.
S-3	10-12	2.0/1.7	0	Similar to above. SP	5/3/3/4	Same as above.
S-4	15-17	2.0/2.0	0	Similar to above with increasing moisture content. SP	2/3/3/2	Same as above.
S-5	20-22	2.0/2.0	0	Similar to above with several mottles. SP	3/4/5/5	Same as above.
S-6	25-27	2.0/2.0	0	SAND, poorly graded, medium to fine with trace (<5%) silt and little (10-20%) coarse sand and gravel (up to 1" max), subrounded to subangular, medium dense, Saturated, 2.5Y4/3 Munsell dk grayish brown, crude to moderately defined stratification with fine sandy layers and zones up to 1" thick. SP	3/3/9/12	Analytical sample collected. Grain size analysis performed-->SP. Head space PID=0 ppm. Breathing zone LEL=8KG.
				BOE at 31'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G3M-92-04X	
CLIENT: AEC			DATE STARTED: 6/29/92			GROUP: 3 (TDA-Maintenance)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/30/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10"			PID METER: Photovac Microtip	
GROUND ELEV.: 251'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 33'	
LOGGED BY: JKR/JC			CHECKED BY: DSP			WATER TABLE BGS: 25.3'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/0.4 2.0/2.0	6.5	Little recovery. Redrove spoon for a surface sample SAND , fine to coarse sand and gravel with trace cobble, well graded, very dense, dry, brown to dark brown. SW	12/33/25/29	Analytical sample collected. 3" spoon. PID=6.5 ppm.	
S-2	2-4	2.0/1.2	0	SAND , medium with little fine to coarse, moderately poorly graded, medium dense, damp, light brown. SW/SP	7/6/6/8	2" spoon.	
S-3	4-6	2.0/1.0	0	SAND , medium with some coarse and little fine, little gravel, moderately poorly graded, medium dense, damp, light brown. SW/SP	6/6/8/14	2" spoon.	
S-4	6-8	2.0/1.1	0	SAND , medium with some coarse and little fine, little gravel, moderately well graded, medium dense, damp, light brown, some stratification with coarser grained layers. SW	4/6/6/8	2" spoon.	
S-5	8-10	2.0/1.4	0	SAND , fine to coarse with trace gravel, moderately well graded, medium dense, damp, light brown, stratified layers 2-10cm thick. SW	6/7/8/8	2" spoon.	
S-6	10-12	2.0/1.5	0	SAND , fine to coarse with little gravel, moderately well graded, medium dense, damp, brown to light brown, similar to S-5. SW	4/9/8/9	2" spoon. PID=0 ppm.	
S-7	12-14	2.0/2.0	0	Similar to S-6. SW	5/6/9/10	Analytical sample collected. 3" spoon.	
S-8	14-16	2.0/1.8	0	SAND , fine to medium with little coarse, moderately poorly graded, medium dense, damp, light brown. SP/SW	4/7/7/8	2" spoon.	
S-9	16-18	2.0/1.4	0	SAND , fine to coarse, moderately poorly graded, medium dense, damp, light brown, stratified with layers 10-20cm. SP	5/10/11/12	2" spoon.	
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SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G3M-92-04X

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-10	18-20	2.0/1.5	0	Similar to S-9 with trace gravel. SP	4/5/15/13	2" spoon.
S-11	20-22	2.0/1.7	0	SAND, medium to coarse with little fine and trace gravel, moderately well graded, medium dense, damp, light brown, light iron stained appearance. SW	4/6/6/7	2" spoon.
S-12	22-24	2.0/1.5	0	Similar to S-11, slightly coarser grained with a little more gravel. SW	4/6/10/7	2" spoon.
S-13	24-26	2.0/1.1	0	SAND, medium to coarse with trace fine and trace gravel, moderately poorly graded, medium dense, very moist to Saturated, light brown. SW/SP	6/8/6/8	Groundwater at ~25'. Grain size analysis performed-->SP. 2" spoon.
S-14	26-28	2.0/2.0	0	SAND, medium to coarse with little gravel and trace fine, moderately poorly graded, loose, wet, brown. SW/SP	1/3/4/9	Analytical sample collected. 3" spoon. Groundwater measured at 25.3' BGS.
S-15	28-30	2.0/-	-	SAND, fine to coarse with little gravel, moderately well graded, loose, wet, brown. SW	1/3/4/4	2" spoon.
S-16	30-32	2.0/1.1	0	SAND, fine to coarse with little gravel, moderately well graded, loose, wet, brown. SW/SP	2/4/5/6	2" spoon.
				BOE at 33'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G3M-92-05X	
CLIENT: AEC		DATE STARTED: 7/01/92			GROUP: 3 (Moore Airfield-DSA)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 7/02/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10"			PID METER: Microtip	
GROUND ELEV.: 252.2'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 35'	
LOGGED BY: JKR/JC		CHECKED BY: DSP			WATER TABLE BGS: 26.8'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.6	BKG	SAND, well graded, fine to coarse, 10-20% gravel, <10% cobbles, medium dense, dry to damp, 2.5YR3/4 Munsell dark reddish brown SW	18/12/9/9	2" spoon
S-2	5-7	2.0/1.6	BKG	SAND, moderate to poorly graded, medium to coarse, 10-20% gravel, medium dense, damp, 7.5YR5/4 Munsell brown to light brown SP/SW	8/8/10/10	2" spoon
S-3	10-12	2.0/1.1	BKG	SAND, moderate to poorly graded, medium to coarse, 10-20% gravel, medium dense, damp, 7.5YR5/2 Munsell brown SP/SW	4/6/10/12	2" spoon
S-4	15-17	2.0/1.0	BKG	SAND, moderate to poorly graded, medium to coarse, 20-35% gravel, medium dense, damp, 7.5YR5/2 Munsell brown SP/SW	10/10/4/8	2" spoon
S-5	20-22	2.0/0.8		SAND, same as S-4	5/12/14/15	2" spoon
S-6	25-27	2.0/1.0	BKG	SAND, same as S-4, saturated at 26.8 feet. SP/SW	4/5/5/7	2" spoon, started adding water to boring. TOC sample collected.
S-7	30-32	2.0/1.3	4.2	SAND, poorly graded, medium to coarse <10% gravel, loose, saturated, 7.5YR5/2 Munsell brown, some stratification with layers 5-20cm thick SP	2/3/7/8	2" spoon Grain size sample collected --> SP
-	32-35	-	-	SAND, same as S-7		
				BOE at 35'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G3M-92-06X	
CLIENT: AEC		DATE STARTED: 7/6/92			GROUP: 3 (Moore Airfield-DSA)	
CONTRACTOR: D.L. Maher		DATE COMPLETED:			PROTECTION: Modified 0	
METHOD: 6.25" HSA		BORING DIAMETER: 10"			PID METER: Microtip	
GROUND ELEV.: 251.7'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 32'	
LOGGED BY: BJS		CHECKED BY: RRR			WATER TABLE BGS: 24'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.7	130	SAND, moderate to poorly graded, 20-30% fines, 5-10% gravel, loose, moist (0.2" silty black layer) 2.5Y3/2 over 2.5Y6/2 Munsell dark brown over light brown. Glacial Outwash SM	4/3/4/3	2" spoon Analytical sample collected.
S-2	2-4	2.0/1.5	104	SAND, similar to S-1, 5% fines. 2.5Y6/2 Munsell light brown SP	4/3/4/3	2" spoon
S-3	4-6	2.0/1.4	12	SAND, well graded, medium to coarse, 5% gravel, loose, moist. 10YR6/2 Munsell Brown-gray, Glacial Outwash SW	2/3/3/6	2" spoon
S-4	6-8	2.0/1.5	10	SAND, top 1-foot - same as above; bottom 0.5-foot - poorly graded, coarse, loose, moist; 10YR5/3 Munsell Brown. Glacial Outwash SW/SP	3/5/5/10	2" spoon
S-5	8-10	2.0/1.6	BKG	SAND, well graded, fine to coarse, loose, moist, 10YR5/3 Munsell Brown. Glacial Outwash SW	4/5/8/10	2" spoon
S-6	10-12	2.0/2.0	BKG	SAND, moderately graded, coarse, 20-35% gravel, overlain by medium to fine, medium dense, 10YR6/2-3/2 Munsell Light brownish gray to very dark grayish brown SW/SP	8/10/14/10	3" spoon Analytical sample collected.
S-7	12-14	2.0/1.6	BKG	SAND, well graded, medium to coarse, loose, moist, 10Yr3/2 Dark grayish brown. Glacial Outwash SW/SP	4/4/4/6	2" spoon
S-8	14-16	2.0/1.6	BKG	SAND, same as S-7, 1.0-foot lense medium to fine, 10YR6/2 Munsell Light brownish gray. SW/SP	3/3/6/11	2" spoon
S-9	16-18	2.0/1.5	BKG	SAND, same as S-7 SW/SP	4/7/7/8	2" spoon
S-10	18-20	2.0/1.4	BKG	SAND, same as S-7 SW/SP	3/4/4/5	2" spoon
S-11	20-22	2.0/1.7	1.0	SAND, well graded medium to fine, loose, moist, 10YR6/2 Munsell Light brownish gray. Glacial Outwash SW/SP	2/3/3/10	2" spoon

SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G3M-92-06X

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-12	22-24	2.0/1.4	BKGD	SAND, well graded, coarse to fine, 10% gravel, loose, moist, 10YR3/2 Munsell Dark grayish brown, Glacial Outwash SW/SP		2" spoon
S-13	24-26	2.0/1.7	BKGD	SAND, similar to S-12, except gradation downward to medium to fine sand, medium dense, saturated 7.5YR3/3 Munsell dark brown SW/SP	5/8/6/7	3" spoon Analytical sample collected.
S-14	26-28	2.0/1.7	BKGD	SAND, moderately graded, medium to fine, medium dense, saturated, 7.5YR3/3 Munsell dark brown, Glacial Outwash SP	4/8/4/5	2" spoon Grain size analysis performed.
S-15	28-30	2.0/1.8	BKGD	SAND, similar to S-14, grading downward to fine sand and 20-35% silt, 7.5Y3/3 Munsell dark brown SP	5/9/12/15	2" spoon
S-16	30-32	2.0/1.8	BKGD	SAND, poorly graded, fine, medium dense, saturated SP	4/9/9/12	2" spoon
				BOE at 32'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G3M-92-07X	
CLIENT: AEC		DATE STARTED: 7/02/92			GROUP: 3 (Moore Airfield-DSA)	
CONTRACTOR: D.L. Maher		DATE COMPLETED: 7/02/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10"			PID METER: 10.6 eV HL-200	
GROUND ELEV.: 249.8'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 32.0'	
LOGGED BY: CPL		CHECKED BY: DSP			WATER TABLE BGS: 24.5'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.8	8KG	0.0-0.6' SAND, well graded, medium to fine, 0-15% silt, 0-15% subrounded gravel, medium dense, 10YR3/2 Munsell Dark brown. Topsoil SW 0.6-1.8' SAND, moderately graded, medium to fine, 0-10% silt, 10-20% subrounded to subangular, medium dense, moist, 2.5Y7/2 Light gray-brown SP	4/6/6/4	Headspace PID=<5, LEL=8KGD Readings of spoon and in headspace were occasionally taken in area downwind of drilling rig.
S-2	5-7	2.0/1.9	8KG	SAND, moderately graded, medium to fine, 0-10% silt, 10-20% subrounded to subangular, loose, moist, 2.5R7/2 Light gray-brown SP	2/3/3/4	Headspace PID=0.3 LEL=8KGD
S-3	10-12	2.0/1.7	0.5	SAND, moderately graded, coarse to medium, loose, slightly moist, 2.5Y7/2 Light grayish brown, stratification with fine sandy layers up to 1/4" SP	2/2/4/6	Headspace PID=0.2 LEL=8KGD
S-4	15-17	2.0/2.0	<0.7	SAND, same as S-3 SP	5/4/6/8	Headspace PID=0.7, LEL=8KGD
S-5	20-22	2.0/1.8	8KG	SAND, same as S-3 SP	2/4/6/10	Headspace PID=0.4, LEL=8KGD
S-6	25-27	2.0/2.0	8KG	SAND, poorly graded, coarse to medium, 0-10% silt, medium dense, saturated, 2.5Y6/2 Munsell Light brownish gray SP some stratification with fine sandy layers		TOC sample taken. Grain size analysis performed. Headspace PID=0.3, LEL=8KGD
				BOE at 32'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: G3M-93-08X	
CLIENT: AEC			DATE STARTED: 5/26/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 5/27/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 28'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: 18'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.6	2.0	Fine to medium SAND: 0 - 5% gravel, 0 - 5% fines. Poorly graded. Medium dense, dry. Brown.	4/7/8/8	SP	
S-2	2-4	2.0/1.3	BG	Fine SAND: 0 - 3% gravel, 0 - 5% fines. Poorly graded. Medium dense to loose.	8/7/9/10	SP	
S-3	4-6	2.0/1.7	2.0	Fine SAND, as in S-2.	5/4/7/8	SP	
S-4	6-8	2.0/1.7	4.0	SAND: well graded.	12/14/13/12	SW	
S-5	8-10	2.0/1.6	3.0	Fine to medium SAND: 0 - 3% gravel, 0 - 5% fines. Poorly graded. Medium dense to loose, dry. Yellowish brown.	7/15/5/7	SP	
S-6	10-12	2.0/1.0	4.0	Fine to medium SAND, as in S-5.	4/4/5/5	SP	
S-7	12-14	2.0/1.2	3.0	SAND: 0 - 5% gravel, 0 - 3% fines. Well graded. Medium dense, damp. Yellowish brown.	6/8/7/8	SW	
S-8	14-16	2.0/1.2	2.0	Medium to fine SAND: 0 - 5% fines. Poorly graded. Loose to medium dense, damp. Pale brown.	7/4/4/5	SP	
S-9	16-18	2.0/1.6	3.0	Medium to fine SAND, as in S-8.	5/8/7/8	SP	
S-10	18-20	2.0/1.4	2.0	Fine to medium SAND: 5 - 12% fines. Poorly graded. Medium dense to loose, saturated. Grayish brown.	7/6/5/8	SP-SM	
S-11	20-22	2.0/1.6	BG	Fine to medium SAND, as in S-10.	3/2/4/5	SP-SM	
S-12	22-24	2.0/2.0	2.0	Fine to medium SAND, as in S-10.	1/2/4/5	SP-SM	
S-13	24-26	2.0/1.8	2.0	Fine to medium SAND, as in S-10.	8/11/12/15	SP-SM	
S-14	26-28	2.0/1.2	2.0	Fine to medium SAND: 0 - 5% fines. Poorly graded. Medium dense, saturated. Grayish brown.	11/12/13/15	SP	
BOE at 28'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: G3M-93-09X	
CLIENT: AEC			DATE STARTED: 5/25/93			STUDY AREA: 3	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 5/26/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 27'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS:16'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.4	BG	Medium to fine SAND: 5 - 12% fines. Poorly graded. Medium dense, dry. Yellowish brown.	5/8/7/8	SP-SM	Color: 10YR5/6
S-2	5-7	2.0/1.3	BG	Medium SAND: 0 - 5% fines. Poorly graded. Medium dense, damp. Dark yellowish brown.	7/7/7/9	SP	Color: 10YR3/4
S-3	10-12	2.0/1.4	BG	Fine SAND: 5 - 12% fines. Poorly graded. Loose, damp. Yellowish brown.	5/4/4/6	SP-SM	Color: 10YR4/2
S-4	15-17	2.0/0.8	BG	Fine SAND, as in S-3. Moist to wet.	9/10/13/11	SP-SM	Color: 10YR4/2 Drillers report change.
S-5	20-22	2.0/1.8	BG	Fine SAND: 10 - 20% fines. Poorly graded. Medium dense, saturated. Dark gray.	5/5/7/8	SM	Color: 10YR4/1
S-6	25-27	2.0/2.0	BG	Fine SAND: 10 - 20% fines. Poorly graded. Medium dense, saturated. Light olive brown.	4/7/6/6	SM	Color: 2.5Y5/4
BOE at 27'							

SOIL BORING LOG - FORT DEVENS, MA.						PROJECT NO.: 6917.04		BORING NO.: G3M-93-10X	
CLIENT: AEC				DATE STARTED: 5/27/93			STUDY AREA: 44 - 52		
CONTRACTOR: New Hampshire Boring				DATE COMPLETED:			PROTECTION: Modified D		
METHOD: HSA				BORING DIAMETER:			PID METER: Model 580B OVM		
GROUND ELEV:				REFERENCE PT. ELEV.:			TOTAL DEPTH: 34'		
LOGGED BY: S. Murray				CHECKED BY:			WATER TABLE BGS: 24'		
SAMPLE NO.	DEPTH (ft)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS		
S-1	0-5			Fine to medium SAND: 0 - 5% gravel, 0 - 5% fines. Poorly graded. Dry, dark yellowish brown.		SP			
S-2	5-20			SAND: 3 - 5% gravel, 0 - 5% fines. Damp, dark brown.		SW	(0 - 20'): logged from auger cuttings		
							Cobbles/gravel seam at 17'		
S-3	20-22	2.0/1.3	BG	SAND: 5% gravel, 0 - 5% fines. Well graded. Medium dense, damp. Brown.	9/5/9/13	SW			
S-4	22-24	2.0/1.2	BG	SAND, as in above interval.	10/13/15/13	SW			
S-5	24-26	2.0/1.3	BG	SAND, as in above interval (saturated)	3/6/11/16	SW			
<p align="center">6 1/4" augers advanced to 34', to facilitate well installation.</p>									

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: G3M-93-11X	
CLIENT: AEC			DATE STARTED: 5/27/93			STUDY AREA: 44/52	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 27'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: < 24'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-1			SAND to GRAVEL		SW/GW	
S-2	1-12			Fine to medium SAND: 0 - 5% gravel, 5 - 12% fines. Poorly graded. Dry, olive brown (2.5Y3/3).		SP-SM	
S-3	12-24			Fine to medium SAND: 0 - 5% gravel, 0 - 5% fines. Poorly graded. Dry, dark grayish brown (2.5Y4/2).		SP	(0 - 24'): logged from auger cuttings
S-4	24-26	2.0/1.4	BG	SAND: 0 - 5% fines. Well graded. Medium dense to dense, saturated. Olive brown (2.5YR4/3).	7/10/14/8	SW	
S-5	26-28	2.0/1.4	BG	SAND, as in S-4.	17/16/17/12	SW	
<p align="center">6 1/4' augers advanced to 34', to facilitate well installation.</p>							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-01X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	2 - 5	2.0/1.7	BKG	SAND, poorly graded, fine to medium, 3% gravel, 3 - 5% fines, medium dense, dry, yellowish brown	4-4-6-8	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-02X	
CLIENT: AEC			DATE STARTED: 5/26/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 5/26/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: 101287	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0 - 3			SAND, poorly graded, medium to fine, 3 - 5% gravel, 0 - 5% fines, dry, yellowish brown		SP	logged from auger cuttings
S-1	3 - 5	2.0/1.1	2	SAND, poorly graded, fine to medium, 0 - 5% fines, medium dense, damp, grayish brown (2.5Y5/2)	6-6-6-6	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-03X	
CLIENT: AEC			DATE STARTED: 5/26/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 5/26/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: 101287	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, medium to fine, 1 - 3% gravel, 0 - 5% fines, dry, yellowish brown		SP	logged from auger cuttings
S-1	3-5	2.0/0.8	BKG	SAND, poorly graded, medium to fine, 1 - 3% gravel, 0 - 5% fines, medium dense, damp, dk grayish brn (2.5Y4/2)	5-5-6-7	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-04X	
CLIENT: AEC			DATE STARTED: 5/26/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 5/26/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: 101287	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, medium to fine, 0 - 5% gravel, 0 - 5% fines, dry, yellowish brown		SP	logged from auger cuttings
S-1	3-5	2.0/1.0	2	SAND, poorly graded, medium to fine, 0 - 5% fines, loose, dry, yellowish brown (10YR5/4)	4-4-6-7	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-05X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, fine to medium, 3% gravel, 0 - 5% fines, dry, dark yellowish brown		SP	logged from auger cuttings
S-1	3-5	2.0/1.4	BKG	SAND, poorly graded, fine to medium, 3% gravel, 0 - 5% fines, medium dense, dry, dark yellowish brown	4-5-6-6	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-06X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, fine to medium, 3% gravel, 3 - 7% fines, dry		SP	logged from auger cuttings
S-1	3-5	2.0/1.4	BKG	SAND, poorly graded, fine, 3 - 7% fines, medium dense, dry, yellowish brown	6-6-6-8	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-07X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.		DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.
		0-3			SAND, poorly graded, fine to medium, 5% gravel, 3 - 7% fines, dry, yellowish brown		SP
S-1		3-5	2.0/1.7	BKG	SAND, poorly graded, fine to medium, 5% gravel, 3 - 7% fines, medium dense, dry, yellowish brown	5-6-7-11	SP
<p align="center">BOE at 5'</p>							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-08X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, fine to medium, 3% gravel, 0 - 5% fines, dry, yellowish brown		SP	logged from auger cuttings
S-1	3-5	2.0/1.8	BKG	SAND, poorly graded, fine to medium, 3% gravel, 0 - 5% fines, loose, dry, yellowish brown	3-4-4-6	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-09X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, fine to medium, 3 - 7% fines, dry, yellowish brown		SP	logged from auger cuttings
S-1	3-5	2.0/1.6	BKG	SAND, poorly graded, fine to medium, 3 - 7% fines, medium dense, dry, yellowish brown	8-9-9-12	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-10X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, fine to medium, 3% gravel, 5 - 12% fines, dry, yellowish brown		SP	logged from auger cuttings
S-1	3-5	2.0/1.4	BKG	SAND, poorly graded, fine to medium, 3% gravel, 5 - 12% fines, medium dense, dry, yellowish brown	7-8-8-9	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-11X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 5'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-3			SAND, poorly graded, fine to medium, 3 - 4% gravel, 3 - 7% fines, dry, yellowish brown		SP	logged from auger cuttings
S-1	3-5	2.0/1.8	BKG	SAND, poorly graded, fine to medium, 3 - 4% gravel, 3 - 7% fines, medium dense, dry, yellowish brown	5-6-6-9	SP	
BOE at 5'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-12X	
CLIENT: AEC			DATE STARTED: 5/26/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 5/26/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.3	BKG	SAND, poorly graded, medium, 5 - 15% fines, medium dense, dry, very dark brown	16-8-8-7	SP-SM	
S-2	5-7	2.0/1.2	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, medium dense, dry, yellowish brown	5-7-9-12	SW	
S-3	10-12	2.0/1.3	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, dense, damp, very dark grayish brown	11-14-24-25	SW	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-13X	
CLIENT: AEC			DATE STARTED: 6/3/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/3/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.1	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, very dense, moist, dark brown (10YR5/3)	25-27-7-8	SP	
S-2	5-7	2.0/1.3	BKG	SAND, as in S-1, but with a seam of coarse sand at 6.0' - 6.2'	23-13-18-17	SP	
S-3	10-12	2.0/1.8	BKG	SAND, well graded, 5 - 12% gravel, 0 - 5% fines, medium dense, moist, dark grayish brown (10YR4/2)	8-12-15-21	SW	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-14X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.4	BKG	<u>Top 0.7'</u> : SAND, poorly graded, fine to medium, 4% gravel, 3 - 5% fines, medium dense, dry, black <u>Bottom 0.7'</u> : SAND, well graded, 3% gravel, 0 - 5% fines, medium dense, dry, dark yellowish brown	5-5-7-8	SP	
						SW	
S-2	5-7	2.0/1.6	BKG	SAND, poorly graded, fine, 0 - 5% fines, medium dense, dark yellowish brown	9-6-10-11	SP	
S-3	10-12	2.0/1.8	BKG	SAND, well graded, 3% gravel, 0 - 5% fines, medium dense, damp, dark brown	7-18-17-13	SW	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-15X	
CLIENT: AEC			DATE STARTED: 6/4/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/4/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/2.0	BKG	<u>Top 1.0'</u> : SAND and GRAVEL <u>Bottom 1.0'</u> : SAND, poorly graded, fine to medium, 3 - 5% gravel, 0 - 5% fines, medium dense, dry, dark yellowish brown	6-6-5-7	SP	
S-2	5-7	2.0/1.4	BKG	<u>Top 0.5'</u> : SAND, well graded, 0 - 5% fines, medium dense, dry, dark yellowish brown <u>Bottom 0.9'</u> : SAND, poorly graded, fine to medium, 0 - 5% fines, medium dense, damp, dark yellowish brown	6-8-5-6	SW SP	
S-3	10-12	2.0/1.8	BKG	SAND, well graded, 5% gravel, 0 - 5% fines, medium dense, dry, dark yellowish brown	7-11-10-12	SW	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-16X	
CLIENT: AEC			DATE STARTED: 6/3/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/3/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/1.1	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, medium dense, dry, pale brown (10YR6/3)	5-5-6-10	SP	
S-2	5-7	2.0/1.2	BKG	SAND, as in S-1	10-11-14-14	SP	
S-3	10-12	2.0/1.3	BKG	<u>Top 0.6'</u> : SAND, poorly graded, fine to medium, 0 - 5% gravel, 5 - 12% fines, very dense, brown (10YR5/3) <u>Bottom 0.7'</u> : SAND, as in S-1	10-25-24-23	SP-SM SP	roots
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-17X	
CLIENT: AEC			DATE STARTED: 6/3/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/3/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/1.3	BKG	SAND, poorly graded, fine, 0 - 5% gravel, 0 - 5% fines, dense, dry, pale brown (10YR6/3)	10-25-24-23	SP	
S-2	5-7	2.0/1.2	BKG	SAND, as in S-1	5-9-9-15	SP	
S-3	10-12	2.0/1.1	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, medium dense, dry, brown (10YR5/3)	not recorded	SW	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-18X	
CLIENT: AEC			DATE STARTED: 6/3/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/3/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/0.9	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, very loose, dry, dk yellowish brn (10YR4/4)	1-2-1-1	SP	
S-2	5-7	2.0/1.8	BKG	Top 1.5': SAND, poorly graded, 5 - 12% gravel, 0 - 5% fines, dense, dry, brownish yellow (10YR4/6)	12-14-16-30	SP	
				Bottom 0.3': SAND, poorly graded, 0 - 5% gravel, 0 - 5% fine, dense, dry		SP	
S-3	10-12	2.0/1.0	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, very dense, dry, yellowish brown (10YR5/6)	42-24-20-22	SP	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-19X	
CLIENT: AEC			DATE STARTED: 6/3/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/3/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 3'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 3'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/1.0	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, medium dense, dry, dark grayish brown (10YR4/2)	5-8-6-5	SW	

BOE at 3' (concrete obstruction)

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-20X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 12'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/0.6	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, loose, damp, dark brown (10YR3/3)	2-3-2-2	SW	
S-2	5-7	2.0/1.8	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, loose, dry, dark brown (10YR3/3)	7-12-18-13	SW	
S-3	10-12	2.0/1.5	BKG	SAND, as in S-2	11-15-15-6	SW	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-21X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 6'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 6'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/1.1	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, medium dense, dry, light yellowish brown (10YR6/4)	14-15-14-13	SW	
S-2	4-6	2.0/1.2	BKG	Top 0.9': SAND, as in S-1 Bottom 0.3': SAND, poorly graded, fine, 0 - 5% gravel, 0 - 5% fines, medium dense, dry	16-12-10-11	SW SP	
BOE at 6'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-22X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 6'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 6'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/1.2	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, medium dense, dry, brown (10YR4/3)	13-13-12-9	SP	
S-2	4-6	2.0/1.6	BKG	Top 0.8': SAND, well graded, 5 - 12% gravel, 0 - 5% fines, medium dense, dry Bottom 0.8': SAND, as in S-1	10-12-12-13	SW SP	
BOE at 6'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-23X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 4'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 4'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/0.4	BKG	<u>Top 1.5'</u> : possible VOID <u>Bottom 0.5'</u> : SAND, well graded, 0 - 5% fines, loose, moist, very dark brown (10YR2/2)	0/18"-2	SW	wood pieces
<p align="center">BOE at 4' (concrete obstruction)</p>							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-24X	
CLIENT: AEC			DATE STARTED: 6/1/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/1/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 6'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 6'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-0.7			CONCRETE			
S-1	0.7-2.7	2.0/1.0	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, medium dense, dry	12-11-10-10	SP	
S-2	4-6	2.0/0.8	BKG	SAND, as in S-1	13-15-15-11	SP	
BOE at 6'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-25X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 10'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
S-1	1-3	2.0/0.7	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, loose, damp, dark grayish brown (10YR4/2)	2-3-3-3	SW	
S-2	4-6	2.0/1.4	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, medium dense, damp, brown (10YR4/3)	5-6-8-9	SP	
S-3	8-10	2.0/1.5	BKG	SAND, well graded, 0 - 5% gravel, 0 - 5% fines, medium dense, damp, dark yellowish brown (10YR4/4)	4-8-9-8	SW	
BOE at 10'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 38B-93-26X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 38	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 6'	
LOGGED BY: J. Bell			CHECKED BY:			WATER TABLE BGS: > 6'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
	0-1			CONCRETE			
	1-4			VOID			
S-1	4-6	2.0/1.0	BKG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, loose, damp, brown (10YR4/3)	3-4-5-5	SP	
BOE at 6'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 44B-92-01X	
CLIENT: AEC			DATE STARTED: 7/8/92			GROUP: 3 (Cannib. Yard "B")	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/8/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 251.2'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JMC/RRR			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.6	3.8	(0-0.6) Silty SAND, little (~10-15%) fine gravel, poorly graded, loose, dry, no visible structure, 10YR4/1 Munsell dark gray, roots, topsoil. SM (0.6-1.6) SAND, mostly fine with little (~10%) medium and trace (~5-10%) silt, poorly graded, rounded, medium dense, dry, 10YR6/8 Munsell brownish yellow, no visible structure, fill. SP	8/12/12/15	Breathing zone PID=0 ppm and LEL=BKG.	
S-2	5-7	2.0/2.0	0	(5.0-5.5) SAND, Same as above (0.6-1.6) SP (5.5-7.0) SAND, medium to coarse with little fine gravel concentrated between 6.5-7.0', poorly graded, rounded, medium dense, slightly damp, 10YR7/6 Munsell yellow, no visible structure, outwash. SP	7/6/5/8	Breathing zone PID=0 ppm and LEL=BKG. Grain-size analysis performed ->SP	
S-3	10-12	2.0/2.0	-	SAND, coarse with trace (~5%) fine gravel grading down to fine to medium with little (~10%) coarse, poorly graded, well rounded, medium dense, damp, 10YR6/6 Munsell brownish yellow grading down to 10YR7/8 Munsell yellow, no visible structure, outwash. SP	10/10/10/11	Breathing zone PID=0 ppm and LEL=BKG.	
				BOE at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 44B-92-02X	
CLIENT: AEC			DATE STARTED: 7/8/92			GROUP: 3 (Cannib. yard "B")	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/8/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 250.6'			REFERENCE PT. ELEV.: N/A			TOTAL DEPTH: 12'	
LOGGED BY: JMC/RRR			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	0	(0-1.0) Silty SAND , fine to medium with little (~10-20%) fine gravel, subangular fragments, medium dense, dry, 10YR4/1 Munsell dark gray, roots, topsoil/fill. SM (1.0-1.5) SAND , fine, poorly graded, greater coarse content than above, dense, dry, 10YR6/8 Munsell brownish yellow, no visible structure, outwash. SP	8/19/14/14	Analytical sample collected. Breathing zone PID=0 ppm and LEL=BKG.	
S-2	5-7	2.0/1.8	0	(5.0-5.5) SAND , fine to medium, poorly graded, medium dense, striations, 10YR8/3 Munsell very pale brown, outwash. (5.5-6.5) Same as above except medium to coarse, 10YR7/6 Munsell yellow, no structure. (6.5-6.8) Same as above except fine to medium with little (~10%) coarse, 10YR6/4 Munsell light yellowish brown. SP	5/8/8/9	Same as above.	
S-3	10-12	2.0/1.8	0	SAND , medium to coarse with trace (~5%) fine gravel, poorly graded, rounded, medium dense, damp, no visible structure, 10YR8/3 Munsell very pale brown, outwash. SP	5/8/9/9	Same as above.	
				BOE at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 44B-92-03X	
CLIENT: AEC			DATE STARTED: 7/8/92			GROUP: 3 (Cannib. Yard "B")	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/8/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 250.7'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JMC/RRR			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	-	SAND, fine with trace (~10%) silt and little (~20%) fine gravel, poorly graded, subangular, medium dense, dry, 10YR7/8 Munsell yellow, no visible structure, fill. SP	5/14/16/11	Analytical sample collected. Breathing zone PID=0 ppm and LEL=BKG.	
S-2	5-7	2.0/1.5	-	SAND, fine with one gravel fragment at top, poorly graded, medium dense, damp, 2.5YR7/8 Munsell yellow grading down to 10YR8/3 Munsell very pale brown with mottling in middle 0.5' interval of both colors, no visible structure, outwash. SP	4/5/7/7	Same as above.	
S-3	10-12	2.0/2.0	-	(10.0-10.4') Same as bottom interval above. (10.4-12.0') Same as above except medium to coarse with trace (~5%) fine gravel. SP	7/10/10/8	Same as above.	
				BOE at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 44B-92-04X	
CLIENT: AEC			DATE STARTED: 7/7/92			GROUP: 3 (Cannib. Yd./2nd fence)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/7/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 251.0'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JMC/BJS			CHECKED BY: RRR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.0	0	SAND, ~70% fine, ~20% medium, ~10% coarse with trace (~10%) silt and trace (~10%) fine gravel (20mm), well graded, subangular gravel pieces, very dense, dry, 5Y5/3 Munsell olive, no visible structure, fill. SW	10/30/36/22	Analytical sample collected. Breathing zone PID=0 ppm and LEL=BKG.	
S-2	5-7	2.0/1.8	0	SAND; (5.0-5.8') ~80% fine and ~20% medium, (5.8-6.8') ~90% medium, ~5% fine, and ~5% coarse with trace (~10%) fine gravel; poorly graded, subrounded, medium dense, dry, 10YR6/4 Munsell light yellowish brown, no visible structure, outwash. SP	5/8/9/12	Same as above.	
S-3	10-12	2.0/2.0	0	SAND, poorly graded, coarse to medium, <5% fines, 15-25% coarse rounded gravel (30-40mm), medium dense, slightly moist, 10YR6/4 Munsell light yellowish brown, some stratification, outwash. SP	12/12/14/10	Analytical sample collected. Breathing zone PID=0 ppm and LEL=BKG. Grain-size analysis performed -> SP	
				BOE at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: 44B-92-05X	
CLIENT: AEC		DATE STARTED: 7/7/92			GROUP: 3 (Cannib. Yard "A")	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 7/7/92			PROTECTION: Modified D	
METHOD: 4.25" HSA		BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 250.6'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JMC/RRR		CHECKED BY: RRR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.5	0	(0-0.2') Black asphalt. (0.2-0.5') Silty SAND, fine to medium with little (10-20%) subangular gravel, poorly graded, medium dense, dry, 10YR3/2 Munsell very dark greyish brown, no visible structure, fill. SM (0.5-1.5') SAND, ~90% fine and ~10% medium with trace (5-10%) silt and trace (5-10%) gravel, poorly graded, medium dense, rounded, dry, 10YR6/8 Munsell brownish yellow, no visible structure, fill. SP	16/12/12/11	Analytical sample collected. Breathing zone PID=0 ppm and LEL=8KG.
S-2	5-7	2.0/1.8	0	SAND, ~90% medium and ~10% coarse with trace (5-10%) fine gravel, poorly graded, rounded, medium dense, dry, 10YR6/4 Munsell light yellowish brown, outwash. SP	6/6/6/12	Same as above.
S-3	10-12	2.0/2.0	0	(10.0-10.9') SAND, ~50% medium and ~50% coarse with little (~15%) fine to coarse gravel, poorly graded, subrounded, medium dense, dry, 10YR6/4 Munsell light yellowish brown, no structure in spoon, outwash. SP (10.9-12.0') Same as above except ~50% fine and ~50% medium sand and no gravel. SP	5/7/11/8	Same as above.
				BOE at 12'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 44B-92-06X	
CLIENT: AEC			DATE STARTED: 7/7/92			GROUP: 3 (Cannib. Yard "A")	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/7/92			PROTECTION: Modified 0	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 250.9'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JMC/RRR			CHECKED BY: RRR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	115	Gravelly SAND , large gravel clasts, well graded, angular (construction rubble?), very dense, dry, 7.5YR3/3 Munsell dark brown, strong oily odor with black oily spots, fill. SW	10/37/20/19	Analytical sample collected. Not enough recovery for duplicate. 11.4 ppm over top end of spoon. 115 ppm max. 97 ppm over cuttings.	
S-2	5-7	2.0/2.0	235	SAND , poorly graded, medium dense, dry, petroleum odor, no visible structure, outwash. SP (5.0-6.5') ~60% medium and ~40% coarse sand with little (10-15%) fine gravel, 2.5Y6/6 Munsell olive yellow. (6.5-7.0') fine sand with trace (5-10%) silt, 2.5Y7/4 pale yellow.	6/8/8/10	74 ppm at top end of spoon. 235 ppm max over lower end of spoon. 32 ppm over hole and cuttings. Analytical sample and duplicate collected. Split with CDM.	
S-3	10-12	2.0/2.0	36	SAND , poorly graded, medium dense, slightly moist, petroleum odor, outwash. SP (10.0-10.7') Same as 6.5-7.0' interval above. (10.7-11.4') Coarse sand, ~20% medium sand, 10YR6/6 Munsell brownish yellow. (11.4-12.0') ~90% coarse sand and ~10% medium sand with trace (5-10%) fine gravel, 10YR6/4 Munsell light yellowish brown.	15/8/11/12	10.8 ppm on top end of spoon. 36 ppm over lower end of spoon. 47 ppm over cuttings. LEL=0. Analytical sample collected. Split with CDM.	
				BOE at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 52B-92-01X	
CLIENT: AEC			DATE STARTED: 6/30/92			GROUP: 3 (SA-52)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/30/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: 10:6 eV PL 100	
GROUND ELEV.: 251.1'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: CPL			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.7	>15	(0-1.0') SAND, well graded medium to fine with little (15-20%) coarse sand and fine gravel and trace (<5%) silt, sub-rounded, medium dense, dry, 7.5YR4/2 Munsell brown, fill. SW (1.0-1.7') SAND, poorly graded, medium to fine with trace (<5%) coarse sand to fine gravel (up to 1" max), subrounded to subangular, loose to medium dense, dry, 7.5YR7/3 Munsell light brown (pinkish gray), fill. SP	10/10/14/16	Analytical sample collected. Breathing zone PID=0 ppm and LEL=BKG. Attribute spoon PID to rig exhaust.	
S-2	5-7	2.0/1.1	BKG	(5.0-5.5') Same as 1.0-1.7' fill. (5.5'-6.1') SAND, moderately graded, medium to fine with trace (<5%) coarse sand and silt and little (~10%) fine gravel (up to 1" max), subrounded, loose, dry to slightly moist, 2.5Y7/2 Munsell light gray. SW	6/5/5/8	Analytical sample collected. Breathing zone PID=0 ppm and LEL=BKG.	
S-3	10-12	2.0/2.0	BKG	Same as S-2 except medium dense. SW	12/9/9/7	Same as above.	
				BOE at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: 52B-92-02X	
CLIENT: AEC		DATE STARTED: 6/30/92		GROUP: 3 (SA-52)		
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/30/92		PROTECTION: Modified D		
METHOD: 4.25" HSA		BORING DIAMETER: 8"		PID METER: 10.6 eV PL-100		
GROUND ELEV.: 251'		REFERENCE PT. ELEV.: NA		TOTAL DEPTH: 12'		
LOGGED BY: CPL		CHECKED BY: DSP		WATER TABLE BGS: Not encountered		
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.3	0	(0-0.7') SAND, moderately graded, medium to fine sand with trace (<5%) silt and little (10-15%) coarse sand and fine gravel (up to 1" max), subrounded to subangular, loose to medium dense, dry, 2.5YR7/2 Munsell light gray [brown], fill. SW (0.7-1.3') SAND, poorly graded, fine to medium with trace (<5%) coarse sand and fine gravel and little (10-15%) silt, subrounded, loose to medium dense, dry, 2.5YR4/2 Munsell dark grayish brown, fill. SP	9/14/14/12	Analytical sample collected. Split with CDM. Head space PID=0 ppm. Breathing zone LEL=8KG. 3" spoon.
S-2	5-7	2.0/1.9	0	(5.0-6.0') SAND, well graded, medium to fine with little (5-10%) silt and coarse sand and fine gravel (up to 1" max), subrounded, loose to medium dense, dry, 10YR3/3 Munsell dark brown, fill. SW (6.0-6.9') SAND, moderately graded, medium to fine with trace (<5%) silt and little (10-15%) coarse sand and fine gravel (up to 1" max), subrounded to subangular, loose to medium dense, dry to moist, 2.5Y7/2 Munsell light gray [brown]. SW	17/9/10/17	Collected analytical sample. Head space PID=0 ppm. Breathing zone LEL=8KG. 2" spoon.
S-3	10-12	2.0/2.0	0	Same as S-2 except more moist, crude stratification. SW	9/12/14/7	Analytical sample collected. Split with CDM. Headspace PID=0 ppm. Breathing zone LEL=8KG. 3" spoon.
				BOE at 12'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: 52B-92-03X	
CLIENT: AEC		DATE STARTED: 6/30/92			GROUP: 3 (SA-52)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/30/92			PROTECTION: Modified D	
METHOD: 4.25" HSA		BORING DIAMETER: 8"			PID METER: 10.6 eV HL-200	
GROUND ELEV.: 250.2'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: CPL		CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.4	0	(0-1.1') SAND, poorly graded, fine to medium with trace (5-10%) silt and gravel (up to 1.5"), surrounded, loose to medium dense, dry, 7.5YR3/2 Munsell dark brown, fill. SP (1.1-1.4') SAND, well graded, medium to fine with trace (<5%) silt and trace (5-10%) coarse sand and fine gravel, medium dense, dry, 10YR3/2 Munsell very dark grayish brown, fill. SW	10/12/17/14	Analytical sample collected. Split with CDM. Head space PID=0 ppm. Breathing zone LEL=BKG. 2" spoon.
S-2	5-7	2.0/1.8	0	(5.0-5.3') Same as 1.1-1.4' interval. (5.3-6.8') SAND, poorly graded, medium to fine with trace (<5%) silt and little (10-15%) coarse sand and gravel (up to 1" max), subrounded to subangular, medium dense, dry to slightly moist, 2.5Y7/2 Munsell light gray [brown]. SP	6/7/8/11	Analytical sample collected. Split with CDM. Head space PID=0 ppm. Breathing zone LEL=BKG. Grain size analysis performed-->SP. 3" spoon.
S-3	10-12	2.0/1.6	0	Same as S-2 except loose.	9/5/5/5	Analytical sample collected. Head space PID=0 ppm. Breathing zone LEL=BKG. 2" spoon.
BOE at 12'						

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 52B-92-04X	
CLIENT: AEC		DATE STARTED: 6/30/92				GROUP: 3 (SA-52)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/30/92				PROTECTION: Modified D	
METHOD: 4.25" HSA		BORING DIAMETER: 8"				PID METER: 10.6 eV HL-200	
GROUND ELEV.: 249.8'		REFERENCE PT. ELEV.: NA				TOTAL DEPTH: 12'	
LOGGED BY: CPL		CHECKED BY: DSP				WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.4	0	(0-0.6') SAND, poorly graded, fine to medium with trace (5-10%) silt and gravel (up to 1.5" max), subrounded, medium dense to loose, dry, 7.5YR3/2 Munsell dark brown, fill. SP (0.6-1.4') SAND, well graded, medium to fine with trace (<5%) silt and trace (5-10%) coarse sand and fine gravel, subrounded, medium dense, dry, 10YR3/2 Munsell very dark grayish brown, fill or natural soil? SW	9/15/14/15	Analytical sample and duplicate collected. Head space PID=0 ppm. Breathing zone LEL=BKG.	
S-2	5-7	2.0/1.6	0	(5.0-5.4') Same as 0.6-1.4' interval of S-1. (5.4-6.6') SAND, moderately graded, medium to fine with trace (<5%) silt and little (10-15%) coarse sand and gravel (up to 1" max), subrounded to subangular, medium dense, dry to slightly moist, 2.5y7/2 Munsell light gray (brown). SW	9/8/9/12	Analytical sample and MS/MSD collected. Head space PID=0 ppm. Breathing zone LEL=BKG.	
S-3	10-12	2.0/2.0	0	Same as above except loose. SW	4/3/3/9	Analytical sample collected. Head space PID=0 ppm. Breathing zone LEL=BKG.	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 52B-92-05X	
CLIENT: AEC			DATE STARTED: 7/1/92			GROUP: 3 (TDA-Maintenance)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/1/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Phetovac Microtip	
GROUND ELEV.: 249.4'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JKR/JC			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.7	50	SAND, well graded, fine to coarse, 10-20% fines, <5% gravel, grades to medium sand with little fine to coarse sand and gravel, medium dense, damp, dark brown to reddish brown, some stratification. SM	17/14/10/11	Analytical sample collected. Grain size analysis performed-->SM 2" spoon.	
S-2	5-7	2.0/1.6	12	SAND, moderately well graded, medium with a little fine and coarse and trace gravel, medium dense, damp, brown. SW/SP	4/6/7/7	Analytical sample collected. 2" spoon.	
S-3	10-12	2.0/1.4	0	SAND, moderately well graded, medium with little fine and coarse sand, medium dense to dense, damp, brown. SW/SP	4/7/9/11	Same as above.	
				BOE at 12' No refusal			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 52B-92-06X	
CLIENT: AEC			DATE STARTED: 6/30/92			GROUP: 3 (TDA-Maintenance)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/30/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 249.4'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JKR/JC			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.3		SAND, well graded, fine to coarse with little gravel and trace silt, medium dense, dry, brown. SW	14/8/8/16	Analytical sample collected. 2" spoon.	
S-2	5-7	2.0/1.6		SAND, moderately well graded, coarse with little fine and gravel, medium dense, damp, brown. SW/SP	7/9/9/11	Same as above.	
S-3	10-12	2.0/1.4		SAND, moderately well graded, medium to coarse (similar to S-2) with a couple dark brown layers of fine sand, medium dense, moist, brown. SW/SP	4/6/7/10	Same as above.	
				BOE at 12' No refusal			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 52B-92-07X	
CLIENT: AEC			DATE STARTED: 7/1/92			GROUP: 3 (TDA-Maintenance)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/1/92			PROTECTION: Modified 0	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 249.1'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JKR/JC			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.4	40	SAND, well graded, fine to coarse with little gravel, medium dense, damp, reddish brown to brown. SW	6/6/7/8	Analytical sample collected. 2" spoon.	
S-2	5-7	2.0/1.1	33	SAND, moderately well graded, medium with some fine and coarse and trace gravel, medium dense, damp, brown. SW/SP	10/10/11/10	Same as above.	
S-3	10-12	2.0/1.4	2	Same as S-2 SW/SP	4/7/6/5	Same as above.	
				BOE at 12' No refusal			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 52B-92-08X	
CLIENT: AEC			DATE STARTED: 7/1/92			GROUP: 3 (TDA-Maintenance)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/1/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 246.8'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JKR/JC			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.2	80	SAND, well graded, fine to coarse sand with trace gravel, medium dense, dry to damp, brown to slightly reddish brown. SW	10/14/14/8	Analytical sample collected. 2" spoon.	
S-2	5-7	2.0/1.2	20	SAND, moderately well graded, medium with some coarse and little fine, medium dense, damp, brown. SP/SW	4/5/7/11	Same as above.	
S-3	10-12	2.0/1.3	2	SAND, moderately well graded, medium, similar to S-2, medium dense, damp, brown. SP/SW	5/5/10/12	Same as above.	
				BOE at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 52B-92-09X	
CLIENT: AEC			DATE STARTED: 7/1/92			GROUP: 3 (TDA-Maintenance)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 7/1/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Photovac Microtip	
GROUND ELEV.: 246.6'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: JKR/JC			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	50	SAND, moderately well graded, medium with some fine and coarse and trace gravel, medium dense, damp, brown to slightly reddish brown. SW/SP	6/8/7/7	Analytical sample collected. 2" spoon.	
S-2	5-7	2.0/1.8	0	SAND, poorly graded, medium with trace fine and little gravel, medium dense, damp, brown to reddish brown. SP	6/6/6/7	Analytical sample collected. Grain size analysis performed -> SP 2" spoon	
S-3	10-12	2.0/1.0	0	SAND, moderately poorly graded, medium to coarse with little gravel, medium dense, damp, brown. SP	4/6/10/10	Analytical sample collected. 2" spoon.	
				BOE at 12'			

GROUP 5 LOGS

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G5M-92-01X	
CLIENT: AEC		DATE STARTED: 6/8/92			GROUP: 5 (North Post Landfill)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/8/92			PROTECTION: Modified D	
METHOD: 6.25" HSA		BORING DIAMETER: 10"			PID METER: Model 580B OVM	
GROUND ELEV.: 238.7'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 40'	
LOGGED BY: LNS		CHECKED BY: BJR			WATER TABLE BGS: 30.6'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/0.8	BKG	SAND, moderately well graded, trace (<5%) gravel, very loose, dry, 10YR7/3 Munsell very pale brown, no structure, glacial outwash. SP	1/1/2/5	
S-2	5-7	2.0/1.7	BKG	Same as above except 10YR8/2 Munsell white, no gravel. SP	2/2/2/3	
S-3	10-12	2.0/1.3	BKG	(10.0-10.5') Same as above except loose. (10.5-11.3') SAND, coarse, otherwise same as above, size gradation is gradual over 0.1'. SP	2/3/3/10	Cobbles and gravel in cuttings may be too large to be retrieved by split spoon.
S-4	15-17	2.0/0.7	BKG	Gravelly SAND, well graded, ~35% gravel from 3mm diameter to 15mm, subangular, medium dense, moist, 7.5YR4/3 Munsell dark brown, till. SW	4/8/6/6	
S-5	20-22	2.0/1.4	BKG	(20.0-20.5') Same as above. SW (20.5-21.4') Same white sand as S-2, medium dense, moist. SP	9/8/8/10	
S-6	25-27	2.0/1.5	BKG	SAND, moderately well graded, fine to medium, no gravel, homogenous, medium dense, moist, 10YR8/2 Munsell white, glacial outwash. SP	6/10/12/30	Sand under hand lens is ~90% quartz grains, ~5% black, small grains (mica?), and ~5% felsic grains (light brown).
S-7	30-32	2.0/1.4	BKG	Gravelly SAND, well graded with some (~45%) gravel, gravel is subrounded to subangular, dense, Saturated, 10YR3/3 Munsell dark brown. SW	10/20/20/19	Analytical sample collected. Grain size analysis performed--> SW-SM. Color describes sand; gravel includes white quartz pebbles and dark gray cobbles.
S-8	35-37	2.0/1.1	BKG	Same as above except medium dense. SW	5/8/10/9	
				BOE at 40'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 06917-04	BORING NO.: G5M-92-02X	
CLIENT: AEC		DATE STARTED: 6/05/92			GROUP: 5 (North Post Landfill)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/08/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10"			PID METER: OVM, LEL, Radiometer	
GROUND ELEV.: 222.1		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 24'	
LOGGED BY: RRR		CHECKED BY: BJR			WATER TABLE BGS: 15'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.4	0	SAND, poorly graded, coarse to fine with little (~15%) fines and trace (~5%) gravel, subrounded, medium dense, dry, 10YR5/4 Munsell yellowish brown, glacial outwash. SP-SM	3/7/7/7	PID=BKG and LEL=0/21
S-2	2-4	2.0/1.0	BKG	Same as S-1 except very loose. SP-SM	2/2/2/2	Same as above.
S-3	4-6	2.0/1.45	BKG	(4.0-4.3') SILT, with some (~30%) fine to medium sand, rounded, stiff, damp, 5YR3/4 Munsell dark reddish brown. ML (4.3-5.45') SAND, poorly graded, fine to coarse, coarsening downward, with little (~15%) fines, subrounded to subangular, medium dense, moist, 7.5YR5/4 Munsell brown, transgressive facies, glacial outwash. SP-SM	5/6/8/9	Same as above.
S-4	6-8	2.0/1.2	BKG	Same as 4.3-5.45' of S-3 except loose. SP-SM	3/5/5/7	Same as above.
S-5	8-10	2.0/1.4	BKG	Same as above, slightly higher moisture content. SP-SM	2/3/5/4	Same as above.
S-6	10-12	2.0/1.4	BKG	Same as above. Gravel and silt lenses in the shoe. SP-SM	4/4/4/7	Same as above.
S-7	12-14	2.0/1.3	BKG	Same as above. SP-SM	3/4/4/6	Same as above.
S-8	14-15	2.0/1.3	BKG	Same as above except 15.0-15.5' is damp and 15.5-16.3' is Saturated SP-SM	2/2/2/4	Same as above and hit water at 15'. Stopped drilling for the weekend at 16'. Analytical sample collected.
S-9	15-16	2.0/1.7	BKG		3/4/3/6	
S-10	16-18	2.0/1.3	BKG	(16.0-17.1') Same as above. SP-SM (17.1-17.3') SILT, with some (~30%) fine to medium sand, stiff, wet, 10YR3/4 Munsell dark yellowish brown. ML	2/2/8/9	S-9 collected on 6/8/92. TOC sample collected from 15-17'. Rock caught in shoe. PID=BKG and LEL=0/21. Grain size analysis performed-->SP.

SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G5M-92-02X

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-11	18-20	2.0/1.1	BKG	(18.0-18.1') Same as 17.1-17.3' of S-10 above. ML (18.1-18.5') SAND, poorly graded, coarse to fine with little (15-20%) fines and trace (~5%) gravel, rounded, medium dense, 7.5YR5/4 Munsell brown. SP-SM (18.5-19.1') Weathered cobbles, igneous and metamorphic, shales weathering to light brown silt.	6/8/19/21	Fractured cobbles and silt packed in shoe. PID=BKG and LEL=0/21.
S-12	20-22	2.0/0.8	BKG	(20.0-20.3') Silty SAND, poorly graded, 30-40% fines, subangular, medium dense, wet 7.5YR5/4 Munsell brown. SM (20.3-20.8') Silt matrix surrounding weathered and fractured rock (cobbles).	6/9/12/13	Fractured cobbles in shoe. PID=BKG and LEL=0/21.
S-13	22-24	2.0/1.1	BKG	(22.0-22.5') SAND, poorly graded, fine to coarse with some (~20%) fines, subrounded to subangular, medium dense, wet, brown. SP-SM (22.5-23.1') Silty SAND, poorly graded, ~30% silt, sand is fine, subrounded, medium dense, wet, yellow brown. SM	2/3/10/14	
				BOE at 24'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G5M-92-03A	
CLIENT: AEC		DATE STARTED: 6/03/92			GROUP: 5 (North Post Landfill)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/03/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10"			PID METER: OVM	
GROUND ELEV.: 236.4'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 24'	
LOGGED BY: RRR		CHECKED BY: DSP			WATER TABLE BGS: 16.6'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/0.7	0	SAND, moderately well graded, coarse to fine with some (~20%) fine gravel, little (~10%) coarse gravel, and little (~10%) silt, subangular, medium dense, moist, 2.5YR3/3 Munsell, no apparent bedding, glacial outwash. SP-SM	6/10/12/11	No reference sample taken.
						Coarse gravel/cobble zone at ~3' (cuttings).
S-2	5-7	2.0/1.0	0	Similar to S-1 except for coarse sand to fine gravel layer at 5.5-5.6', and silt at 0.8'. Some (~20%) fine sand, subrounded, very dense, wet from water in casing due to accidental discharge from hose, 2.5YR3/3 Munsell dark reddish brown, no bedding, glacial outwash. SP-SM	11/26/42/10	5.8' pushing rock with spoon.
						Silty sand layer at 8.0' (cuttings) with some (~20%) coarse gravel and cobbles, rounded.
S-3	10-12	2.0/1.4	0	(10.0-11.0') SAND, well graded, subangular fine gravel to fine sand, very dense, moist, 2.5YR3/4 Munsell dark reddish brown. SW (11.0-11.4') Silty SAND, some (~20%) fine to medium sand and some (~20%) coarse sand, subrounded, 2.5YR4/3 Munsell reddish brown grading to 2.5YR6 Munsell gray. SM	14/30/35/16	Rock caught in spoon.
S-4	15-17	2.0/1.3		(15.0-15.9') Sandy SILT to Silty SAND, poorly graded, little (~15%) medium to coarse sand, rounded, medium dense, Saturated, Munsell dark reddish brown. ML-SM (15.9-16.3') Same as above except 2.5YR6 Munsell gray medium to coarse sand.	14/14/10/10	Analytical sample collected. Water at 16.6'.
S-5	20-22	2.0/1.5	0	(20.0-20.5') Fine SAND, 20-30% silt, poorly graded, subrounded, very dense, wet, 2.5YR6 Munsell gray. SM (20.5-21.1') Silty SAND, fine with ~20% coarse gravel, subangular, very dense, wet, 2.5YR3/4 Munsell dark reddish brown. SM Continued on next page.	16/52/84/42	

SOIL BORING LOG - FORT DEVENS, MA.
BORING NO.: G5M-92-03A

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-5 cont.	20-22	2.0/1.5	0	(21.1-21.5') SAND, moderately well graded, coarse to fine with some (~20%) fines and little (~10%) gravel, subrounded, very dense, wet, 2.5YR3/4 Munsell dark reddish brown. SP-SM	16/52/84/42	
				BOE at 24'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G5M-92-03B	
CLIENT: AEC			DATE STARTED: 6/18/92			GROUP: 5 (North Post Landfill)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/19/92			PROTECTION: Modified 0	
METHOD: 6.65" HSA			BORING DIAMETER: 10"			PID METER: OVM	
GROUND ELEV.: 237.9'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 38'	
LOGGED BY: BBJ			CHECKED BY: BJR			WATER TABLE BGS: 28-29'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/0.6	0	SAND, moderately well graded, coarse to fine with little (~15%) silt and little (~10%) coarse gravel, medium dense, moist, 7.5YR4/6 Munsell strong brown, no apparent bedding, glacial outwash. SP-SM	3/15/14/13		
						Cobbles and boulders from 1.5-5.0'.	
S-2	5-7	2.0/0.5	0	Silty SAND, poorly graded, fine with some (~30%) silt and some (~20%) fine gravel, subrounded, medium dense, moist, 10YR3/6 Munsell dark yellowish brown, no apparent bedding, glacial outwash. SM	3/6/5/5		
S-3	10-12	2.0/1.3	0	SAND, poorly graded, fine with trace (~5%) silt, loose, moist to damp with depth, 10YR7/2 Munsell light gray, no apparent bedding, glacial outwash. SP	8/4/4/4		
S-4	15-17	2.0/1.7	0	SAND, poorly graded, fine with trace (<5%) silt, loose, moist to damp at stratifications, 2.5Y8/4 Munsell pale yellow, stratified with more silt (~5%) in 0.1-0.5' layers, glacial outwash. SP	2/4/4/8		
						17.0-18.0' hit cobbles/gravel with augers.	
S-5	20-22	2.0/1.0	0	SAND, well graded, fine to coarse with some (~20%) fine gravel and trace (~5%) silt, subrounded, medium dense, moist, 10YR3/4 Munsell dark yellowish brown, no bedding, glacial outwash. SW	5/8/7/9		
S-6	25-27	2.0/0.8	0	Gravelly SAND, poorly graded, fine to medium with little (~10%) coarse sand and trace (~5%) silt, subrounded, dense, moist, 10YR7/3 Munsell very pale brown, no bedding, fewer gravel with depth. SP	20/22/14/16	Augers in cobbles, cobbles at head of augers at 25'.	
						WATER at 29.5' BGS in augers (augers at 30' BGS).	
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SOIL BORING LOG - FORT DEVENS, MA.
BORING NO.: G5M-92-03B

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-7	30-32	2.0/1.2	0	Similar to S-6 except 10YR4/2 Munsell dark grayish brown, very dense, Saturated , bedding. SP	12/16/17/16	Analytical sample collected. 3" spoon. Grain size analysis performed--> SP-SM .
S-8	35-37	2.0/0.7	0	SAND , well graded, fine to medium with some (~20%) coarse sand, little (~15%) fine gravel, and trace (~5%) silt, medium dense, wet, 10YR6/6 Munsell brownish yellow, no bedding. SW	5/5/7/8	
				BOE at 38'		

TEST PIT FIELD LOG - FORT DEVENS, MA					PROJECT NO.: 6917-04	TEST PIT NO.: 09E9201X
CLIENT: AEC			DATE: 7/7/92		STUDY AREA: SA-9, LF-5	
CONTRACTOR: D. L. Maher			Time: 1320 End: 1405		PROTECTION: Level D	
GEOLOGIST: I. Broadwater, J. Corulla			GROUND ELEV.: 222.1'		TOTAL DEPTH: 9'	

DEPTH	SOIL DESCRIPTION	USCS	NOTES
0'	SAND, poorly graded, medium, 0-10% gravel, loose, moist, brown.	SP	MS/MSD volume taken at 4' feet (#178)
1'			
2'			
3'	PEAT, mostly wood with some electrical conduit pipes, occasional brick, some wood appears black and charred, Fill.	PT	
4'			
5'			
6'			
7'			
8'			
9'	End of Test Pit at 9' (no water encountered)		
10'			
11'			
12'			
13'			
14'			

No.	Serial No.	Depth	Field #	PID
S-1	178	4'	EX090104	BKG
S-2	179	8'	EX090108	BKG

TEST PIT FIELD LOG - FORT DEVINS, MA				PROJECT NO.: 6917-04		TEST PIT NO.: 09E9202X	
CLIENT: AEC			DATE: 7/7/92			STUDY AREA: SA-9, LF-5	
CONTRACTOR: D. L. Maher			Time: 1120		End:		PROTECTION: Level D
GEOLOGIST: I. Broadwater, J. Corulla			GROUND ELEV.: 222.1'			TOTAL DEPTH: 9'	

DEPTH	SOIL DESCRIPTION	USCS	NOTES
0'	SAND, poorly graded, medium, 10-20% gravel, loose, moist, brown.	SP	
1'			
2'			
3'			
4'	PEAT, charred wood with stained sand	PT	
5'			
6'			
7'			
8'			
9'	End of Test Pit at 9' (no water encountered)		
10'			
11'			
12'			
13'			
14'			

No.	Serial No.	Depth	Field #	PID	
S-1	182 A,B,C	5'	EX090205	BKG	
S-2	183 A,B,C	8'	ED090208	BKG	
S-2	439 A,B,C	8'	EX090205	BKG	

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TEST PIT FIELD LOG - FORT DEVENS, MA				PROJECT NO.: 6917-04		TEST PIT NO.: 09E9203X	
CLIENT: AEC			DATE: 7/7/92			STUDY AREA: SA-9, LF-5	
CONTRACTOR: D. L Maher			Time: 0855		End:		PROTECTION: Level D
GEOLOGIST: I. Broadwater, J. Corulla			GROUND ELEV.: 225.2'			TOTAL DEPTH: 9'	

DEPTH	SOIL DESCRIPTION	USCS	NOTES
0'	SAND, well graded, fine to coarse, 10-20% gravel, loose, moist, brown	SW	
1'		N/A	
2'	MIXED REFUSE, tires, bottles, roof slate at 2.5-feet, carpet, clear plastic, automobile parts (red)		
3'			
4'			
5'			
6'			
7'			
8'			
9'			
10'			
11'			
12'			
13'			
14'			

No.	Serial No.	Depth	Field #	PID	
S-1	186 A,B,C	1'	EX090301	BKG	
S-2	187 A,B,C	5'	ED090305	BKG	
S-3	188 A,B,C	9'	EX090309	BKG	

TEST PIT FIELD LOG - FORT DEVENS, MA					PROJECT NO.: 6917-04	TEST PIT NO.: 09E9204X
CLIENT: AEC			DATE: 7/7/92		STUDY AREA: SA-9, LF-5	
CONTRACTOR: D. L Maher			Time: 1530 End:		PROTECTION: Level D	
GEOLOGIST: I. Broadwater, J. Corulla			GROUND ELEV.: 209.6'		TOTAL DEPTH: 9'	
DEPTH	SOIL DESCRIPTION				USCS	NOTES
0'	SAND, poorly graded, medium to coarse, 0-10% silt, 0-10% angular gravel, moist				SP	
1'						
2'						
3'	PEAT, decayed organics, 10-20% silt and clay, saturated, soft				PT	
4'	SILT, slightly plastic, 20% fine to medium sand, saturated, soft				ML	
5'						
6'						
7'						
8'						
9'	End of Test Pit at 9' (no water encountered)					
10'						
11'						
12'						
13'						
14'						
No.	Serial No.	Depth	Field #	PID		
S-1	404 A,B,C	3'	EX090403	BKG		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 21B-93-01X	
CLIENT: AEC			DATE STARTED: 6/7/93			STUDY AREA: 21	
CONTRACTOR: none			DATE COMPLETED: 6/7/93			PROTECTION: Modified D	
METHOD: hand dug			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 4'	
LOGGED BY: D. Pierce			CHECKED BY:			WATER TABLE BGS: > 4'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0 - 1.2	NA	BKG	Clayey SAND, fine to medium sand, 5 - 10% gravel to 1 in. max. (sub-rounded), 20 - 30% slightly to mod plastic fines, loose, damp, dark grayish brown (10YR4/2), small root fibers, apparent FILL	NA	SC	Hole dug by hand shovel.
S-2	1.2 - 1.6	NA	BKG	SAND, poorly graded, fine to medium sand, < 5% fine gravel (sub-rounded), 5 - 12% nonplastic fines, loose, damp, very dark brown (10YR2/2), small root fibers, rich in decayed organics, buried RESIDUAL SOIL	NA	SP-SM	
S-3	1.6 - 4.0	NA	BKG	SAND, poorly graded, fine to medium sand, 5 - 10% gravel to 3 in. max. (sub-rounded), < 5% nonplastic fines, medium dense, damp, dark yellowish brown (10YR4/6), small root fibers	NA	SP	Analytical sample BX210102 composited from 2.0'-4.0' with stainless steel spoon and pail.
BOE at 4.0'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 21B-93-02X	
CLIENT: AEC			DATE STARTED: 6/7/93			STUDY AREA: 21	
CONTRACTOR: none			DATE COMPLETED: 6/7/93			PROTECTION: Modified D	
METHOD: hand dug			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 4'	
LOGGED BY: D. Pierce			CHECKED BY:			WATER TABLE BGS: > 4'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0 - 0.5	NA	BKG	Silty SAND, uniform, fine, sub-rounded, 10 - 20% slightly plastic fines, loose, damp, very dark brown (10YR2/2), small root fibers, rich in decayed organics, RESIDUAL SOIL	NA	SM	Hole dug by hand shovel and post-hole digger
S-2	0.5 - 1.6	NA	BKG	Sandy SILT, nonplastic to slightly plastic, 40 - 60% fine sand (sub-rounded), firm, damp, yellowish brown (10YR5/8), small root fibers, grades into unit below	NA	ML-SM	
S-3	1.6 - 2.9	NA	BKG	Silty SAND, uniform, fine, 20 - 35% nonplastic fines, medium dense, damp, brownish yellow (10YR6/8), small root fibers	NA	SM	Analytical sample BX210202 composited from 2.0' to 4.0' using stainless steel spoon and pail
S-4	2.9 - 4.0	NA	BKG	SAND, well graded, fine to coarse, gravel to 3 in. max. (sub-rounded), 5 - 12% nonplastic fines, dense, damp, brownish yellow (10YR6/8), small root fibers	NA	SW-SM	
BOE at 4'							

GROUP 6 BORING LOGS

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G6M-92-01X	
CLIENT: AEC			DATE STARTED: 6/18/92			GROUP: 6 (Moore Air Field-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/18/92			PROTECTION: Modified 0	
METHOD: 6.65" HSA			BORING DIAMETER: 10"			PID METER: Model 5808 OVM	
GROUND ELEV.: 263.1'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 66'	
LOGGED BY: NWH			CHECKED BY: BJR			WATER TABLE BGS: 57'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.6	BKG	(0-0.4') Topsoil. (0.4-1.6') SAND, moderately well graded, trace (~5%) gravel (0.5" max), subrounded, medium dense, dry, 10YR5/8 Munsell yellowish brown, interbedded thin dark brown layers. SW	4/9/9/10	2" spoon.	
S-2	2-4	2.0/1.5	BKG	(2.0-3.0') SAND, same as above except loose. SW (3.0-3.5') SAND, poorly graded, medium, subrounded, loose, damp, 10YR2/2 Munsell very dark brown. SP	4/3/3/6	2" spoon.	
S-3	4-6	2.0/1.1	BKG	SAND, well graded, little (~10%) gravel (0.5" max), subrounded, medium dense, damp, 10YR6/3 Munsell pale brown. SW	10/12/14/9	2" spoon.	
S-4	6-8	2.0/1.2	BKG	SAND, poorly graded, medium to coarse, subrounded, loose, damp, 10YR6/4 Munsell light yellowish brown. SP	2/2/4/4	2" spoon.	
S-5	8-10	2.0/1.5	BKG	SAND, moderately well graded, trace (~5%) gravel (0.5" max), subrounded, loose, damp, 10YR6/3 Munsell pale brown. SW	1/2/4/8	2" spoon.	
S-6	10-12	2.0/1.2	BKG	SAND, well graded, some (~20%) gravel (0.75" max), subrounded, loose, damp, 10YR6/6 Munsell brownish yellow. SW	2/5/5/4	2" spoon.	
S-7	12-14	2.0/2.0	BKG	SAND, poorly graded, fine to medium, subrounded, medium dense, damp, 10YR8/4 Munsell very pale brown. SP	2/4/8/7	2" spoon.	
S-8	14-16	2.0/1.7	BKG	SAND, poorly graded, fine to medium, subrounded, loose, damp, 2.5Y8/4 Munsell pale yellow. SP	3/3/4/6	2" spoon.	
S-9	16-18	2.0/1.3	BKG	SAND, same as above. SP	2/2/5/8	2" spoon.	

(continued)

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SOIL BORING LOG - FORT DEVENS, MA.
BORING NO.: G6M-92-01X (continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-23	44-46	2.0/1.2	8KG	SAND , poorly graded, fine, subrounded, loose, damp, 10YR7/4 Munsell very pale brown. SP	4/4/6/9	2" spoon.
S-24	46-48	2.0/1.6	8KG	(46.0-47.0') SAND same as above except medium dense. SP (47.0-47.6') SAND , poorly graded, fine with trace (~10%) silt, subrounded, medium dense, damp, 10YR5/2 Munsell grayish brown. SP-SM	2/4/7/9	2" spoon.
S-25	48-50	2.0/1.4	8KG	SAND , poorly graded, fine to medium, subrounded, medium dense, damp, 10YR7/4 Munsell very pale brown. SP	2/4/8/10	2" spoon.
S-26	50-52	2.0/1.4	8KG	SAND same as above. SP	2/4/7/10	2" spoon. Grain size analysis performed--> SP
S-27	52-54	2.0/1.4	8KG	SAND , poorly graded, fine with trace (~10%) silt, subrounded, medium dense, damp, interbedded with thin bands of silty sand, 10YR7/2 Munsell light gray. SP	3/6/16/15	2" spoon.
S-28	54-56	2.0/1.4	8KG	SAND , poorly graded, fine, medium dense, damp, 2.5Y8/4 Munsell pale yellow. SP	3/10/16/18	2" spoon.
S-29	56-58	2.0/1.4	8KG	SAND , poorly graded, fine to medium, subrounded, medium dense, moist to Saturated (below 57'), 2.5Y5/4 Munsell light olive brown. SP	2/7/14/16	2" spoon. Analytical sample collected.
S-30	58-60	2.0/1.8	8KG	SAND , same as above, and saturated. SP	4/5/12/14	2" spoon.
S-31	60-62	2.0/2.0	8KG	SAND , same as above. SP	4/9/9/15	2" spoon.
S-32	62-64	2.0/1.6	8KG	SAND , same as above. 0.5" thick layer of clayey/silty sand at 63.5'. SP	4/8/15/18	2" spoon.
S-33	64-66	2.0/1.7	8KG	SAND , poorly graded, fine to medium with trace (~10%) silt, subrounded, medium dense, saturated, 2.5YR5/4 Munsell yellowish brown. SP	4/5/10/14	2" spoon.
				BOE at 66'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G6M-92-02X	
CLIENT: AEC			DATE STARTED: 6/11/92			GROUP: 6 (Moore Air Field-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/12/92			PROTECTION: Modified 0	
METHOD: 6.65" HSA			BORING DIAMETER: 10"			PID METER: Photovac Microtip	
GROUND ELEV.: 268.6'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 73'	
LOGGED BY: RRR			CHECKED BY: BJR			WATER TABLE BGS: 65'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/8"	COMMENTS	
S-1	0-2	2.0/2.0	BKG	(0-0.3') White cement dust and chips. (0.3-2.0') SAND, moderately well graded, coarse to fine with some (15-20%) fines, subrounded, medium dense, damp, light brown. SP-SM	5/8/9/10	Analytical sample and MS/MSD collected. Split with EPA. Initially drilled through 6" of pavement. PID=BKG and LEL=0/21. 3" spoon.	
S-2	5-7	2.0/1.4	BKG	SAND, same as above. SP-SM	3/6/9/6	2" spoon. PID=BKG, and LEL=0/21.	
S-3	10-12	2.0/1.3	BKG	SAND, same as above except slightly coarser, loose. Cement dust and chips at top of spoon. SP	3/3/6/4	Analytical sample collected. 2" spoon. PID=BKG and LEL=0/21.	
S-4	15-17	2.0/1.5	BKG	(15.0-15.3') SAND, same as above. SP (15.3-16.5') SAND, poorly graded, medium to fine with trace (~10%) fines, subrounded to rounded, loose, damp to dry, gray-tan. SP-SM	4/2/2/2	Lithology change. 2" spoon. PID=BKG and LEL=0/21.	
S-5	20-22	2.0/1.6	BKG	SAND, poorly graded as above, 7.5YR6/2 Munsell pinkish gray. SP-SM	4/2/5/9	2" spoon. PID=BKG and LEL=0/21.	
S-6	25-27	2.0/2.0	BKG	SAND, poorly graded as above, 0.01' thick discontinuous clay lenses, medium dense. SP-SM	6/9/8/10	Analytical sample collected. Split with EPA. 3" spoon. PID=BKG and LEL=0/21.	
S-7	30-32	2.0/1.6	BKG	(30.0-30.2') SAND, moderately well graded, coarse to fine, subrounded, medium dense, damp, tan. SW-SP (30.2-30.5') SILT, with some (~20%) fine sand, subrounded, very stiff, damp, green-brown. ML-SM (30.5-31.6') SILTY SAND, poorly graded, fine, subangular, medium dense, damp to dry, light tan. SM	4/8/8/10	Lithology change. 2" spoon. PID=BKG and LEL=0/21.	
S-8	35-37	2.0/1.6	BKG	(35.0-35.5') SILTY SAND as above. SM (35.5-36.6') SAND, poorly graded, fine to medium coarsening downward, subangular to subrounded, medium dense, damp, light tan. SP	4/7/8/8	2" spoon. PID=BKG and LEL=0/21.	
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SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G6M-92-02X

(continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-9	40-42	2.0/1.5	BKG	(40.0-40.3') SILTY SAND, poorly graded, fine, sub-angular, medium dense, damp to dry, light tan. SM (40.3-41.5') SAND, poorly graded, fine to medium, coarsening downward, subangular to subrounded, medium dense, damp, light tan. SP	4/7/8/8	Analytical sample collected. 2" spoon. Silty sand sitting inside stem as it moves down. PID=BKG and LEL=0/21.
S-10	45-47	2.0/1.3	BKG	SAND, poorly graded as above. SP	6/7/10/12	2" spoon. PID=BKG and LEL=0/21.
S-11	50-52	2.0/-	BKG	SILTY SAND, poorly graded, as above with increased silt content (20-30%). SM	4/10/15/16	Same as above.
S-12	55-57	2.0/1.3	BKG	SILTY SAND, poorly graded, fine, subrounded, medium dense, moist, light tan. SM	6/9/12/24	Same as above.
S-13	60-62	2.0/1.6	BKG	SILTY SAND, as above grading to Sandy SILT, medium dense grading to very stiff, moist to Saturated brown. SM/ML	9/9/14/19	Same as above.
S-14	65-67	2.0/2.0	BKG	SANDY SILT, as above, moist to saturated 5.0-65.4', from 65.4-67.0' saturated. ML	5/7/9/8	Analytical sample collected. 2" spoon. Grain size analysis performed-->ML. PID=BKG and LEL=0/21.
						Stopped drilling at 67' at end of day on 6/11/92 at 1510. Resumed drilling on 6/12/92 at 0810.
S-15	70-72	2.0/2.0	BKG	(70.0-70.4') SAND, moderately well graded, coarse to fine, subangular, loose, saturated, light brown. SW/SP (70.4-72.0') SAND grading to Sandy SILT, poorly graded, fine, subrounded, loose grading to firm, saturated, light brown. SP/SM	3/4/4/4	Same as above and no detects on draeger tubes (Benzene 0.5/A 5/D and 1,1,1-TCA 50/D. Lithology change.
				BOE at 73'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G6M-92-03X	
CLIENT: AEC		DATE STARTED: 6/09/92		GROUP: 6 (Moore Air Field-DSA G6)		
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/10/92		PROTECTION: Modified D		
METHOD: 6.65" HSA		BORING DIAMETER: 10"		PID METER: Photovac Microtip		
GROUND ELEV.: 267.0'		REFERENCE PT. ELEV.: NA		TOTAL DEPTH: 70'		
LOGGED BY: RRR		CHECKED BY: BJR		WATER TABLE BGS: 62'		
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/2.0	BKG	(0-1.2') SILTY SAND, poorly graded, medium to fine with some (30-40%) silt and trace (~10%) coarse sand, subangular, loose, damp, brown. SM (1.2-1.4') SILTY SAND same as above except gray. SM (1.4-2.0') SAND, poorly graded, medium to fine with trace (~10%) fines and trace (~5%) coarse sand, subrounded, loose, damp, tan. SP	4/4/5/6	Analytical sample collected. Over-drove the spoon ~1' to ensure recovery. PID=BKG and LEL=0/21.
S-2	5-7	2.0/1.5	BKG	(5.0-6.1') SAND, poorly graded, same as 1.4-2.0' of S-1. SP (6.1-6.5') SAND, moderately poorly graded, coarse to fine with little (~20%) fines and little (~15%) gravel, subrounded, very loose, moist, light brown, glacial outwash. SP-SM	1/0/1/0	With one hammer blow, the spoon dropped 18". The next blow dropped the spoon an additional 12". PID=BKG and LEL=0/21.
						Cuttings: poorly sand as above.
S-3	12-14	2.0/1.7	BKG	SAND, moderately poorly graded as 6.1-6.5', loose. SP-SM	3/3/4/3	Analytical sample collected. Over-drove spoon ~1' to ensure recovery. PID=BKG and LEL=0/21.
S-4	15-17	2.0/1.3	BKG	SAND same as above. SP-SM	3/3/4/5	Rock caught in shoe. PID=BKG and LEL=0/21.
S-5	20-22	2.0/1.6	BKG	(20.0-20.2') SAND same as above. SP-SM (20.2-21.6') SILTY SAND, poorly graded, fine, subrounded, loose, damp, light tan. SM	4/4/6/8	Lithology change.
						Cuttings: silty sand as above.
S-6	25-27	2.0/1.7	BKG	(25.0-25.2') SAND, poorly graded, medium to fine with some (25-30%) silt, subrounded, medium dense, moist, tan. SP-SM (25.2-26.4') SILTY SAND, poorly graded, fine, subrounded, medium dense, moist. SM	4/6/10/14	Analytical sample collected. Over-drove spoon ~1' to ensure recovery. PID=BKG and LEL=0/21. Alternat
Continued on next page.				ABB ENVIRONMENTAL SERVICES, INC. PAGE 1 OF 2		

SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G6M-92-03X

(continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-6 cont.	25-27	2.0/1.7	BKG	(26.4-26.5') SILT with trace (~10%) fine sand, stiff, moist, greenish brown. ML (26.5-26.7') SILTY SAND, same as 25.2-26.4'. SM	4/6/10/14	See previous page.
S-7	30-32	2.0/1.6	BKG	SAND, poorly graded, fine with trace (~10%) silt, subrounded, medium dense, damp, light brown. SP	4/5/8/10	Stop drilling at 1630 on 6/09/92. Start drilling at 0900 on 6/10/92.
S-8	35-37	2.0/1.8	BKG	(35.0-35.7') SILTY SAND, poorly graded, fine, subangular, medium dense, moist, light brown. SM (35.7-35.8') SILT, very stiff, moist, greenish brown. ML (35.8-36.8') SILTY SAND, same as 35.0 - 35.7' SM	4/9/9/10	PID=BKG and LEL=0/21.
S-9	40-42	2.0/1.6	BKG	SILTY SAND, same as above. SM	4/8/10/12	Analytical sample and duplicate collected. PID=BKG and LEL=0/21.
S-10	45-47	2.0/2.0	BKG	SILTY SAND, same as above except loose. SM	3/4/6/8	PID=BKG and LEL=0/21.
S-11	50-52	2.0/1.6	BKG	(50.0-50.6') SILTY SAND same as above, except medium dense. SM (50.6-51.6') SILTY SAND, same as above except color change to tan. SM	4/8/8/8	PID=BKG and LEL=0/21. Draeger tubes for benzene and 1,1,1-TCA--> no detects.
S-12	55-57	2.0/2.0	BKG	(55.0-56.5') SILTY SAND, same as above. SM (56.5-56.7') SILTY SAND, very stiff, saturated, dark brown. CL (56.7-57.0') SILTY SAND, same as 55.0-56.5' (saturated?) SM	5/9/11/21	Analytical sample collected. Split with EPA/oversight contractors. The clay layer is saturated, but does not appear to be the water table. Clay is holding on to recharge water. PID=BKG and LEL=0/21.
S-13	60-62	2.0/1.6	BKG	SILTY SAND, same as above except 60.0-61.4' damp, and 61.4-61.6' Saturated, 0.01' thick clay layer at 60.7'. SM	3/4/10/25	Grain size analysis performed-->SM. PID=BKG and LEL=0/21.
S-14	65-67	2.0/0.9	BKG	(65.0-65.6') SAND, poorly graded, medium to fine with some (20-30%) fines and trace (5-10%) coarse sand, subangular, loose, saturated, brown. SP-SM (65.6-65.9') SILTY SAND, poorly graded, sand is fine, subangular, stiff, saturated, brown to light reddish brown. SM-ML	4/6/4/14	Note: This sand may be residual left in the - auger from above. PID=BKG and LEL=0/21.
				BOE at 70'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G6M-92-04X	
CLIENT: AEC		DATE STARTED: 6/15/92			GROUP: 6 (Moore Air Field-FTA)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/16/92			PROTECTION: Modified D	
METHOD: 6.65' HSA		BORING DIAMETER: 10"			PID METER: Photovac Microtip	
GROUND ELEV.: 268.0'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 72'	
LOGGED BY: RRR		CHECKED BY: 8JR			WATER TABLE BGS: 63.7'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.6	BKG	(0-0.3') Organic soil, roots, silty, loose, dry, dark brown. OL (0.3-1.6') SAND, moderately poorly graded, coarse to fine with little (~20%) silt and trace (~5%) gravel, medium dense, dry, tan. SM-SP	5/8/11/17	PID=BKG and LEL=0/21.
S-2	5-7	2.0/1.5	BKG	Alternating bands ~0.2' thick of silty organic soil as above (OL) and moderately poorly graded sand as above (SM-SP), loose.	1/2/4/4	Same as above.
S-3	10-12	2.0/1.8	BKG	(10.0-11.5') Silty and clayey dark organic soil with some (~20%) fine sand, stiff, wet from 10.5-11.0'. OL-OH (11.5-11.8') SAND, moderately poorly graded as 0.3-1.6', dry, loose. SM-SP	3/3/6/7	Same as above.
				2 3		Encountered some large cobbles.
S-4	15-17	2.0/1.3	BKG	(15.0-16.0') Black organic soil with roots-->riding down the hole inside the auger. (16.0-16.3') SAND, moderately well graded, coarse to fine with little (~15%) gravel and trace (~10%) fines, rounded to subrounded, medium dense, dry, tan. SP-SM	5/5/7/10	PID=BKG and LEL=0/21.
S-5	20-22	2.0/1.3	BKG	SAND, same as above. SP-SM	4/7/7/8	Same as above.
S-6	25-27	2.0/1.0	BKG	SAND, poorly graded, medium to coarse with little (~15%) fine sand, subrounded to rounded, loose, dry, light tan-yellow. SP	4/3/3/6	Note: ceased taking reference samples due to lack of jars. Draeger tubes taken from 22.0-25.0' resulted in no detects for benzene or 1,1,1-TCA. PID=BKG and LEL=0/21.
S-7	30-32	2.0/1.5	BKG	SAND, moderately graded, medium to fine with little (~15%) coarse and little (~15%) fines, black igneous chips at 1.3', subrounded, loose, damp, tan with dark rust colored staining at 31.0'31.1'. SP-SW	3/3/6/7	Same as above.

SOIL BORING LOG - FORT DEVENS, MA.
BORING NO.: G6M-92-04X

(continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-8	35-37	2.0/1.2	BKG	SAND, same as above except no discoloration. SP-SW	5/5/5/10	PID=BKG and LEL=0/21.
S-9	40-42	2.0/1.3	BKG	SAND, poorly graded, fine to coarse with little (15-20%) fines, subrounded, medium dense, damp, light tan yellow. SM	6/8/8/7	Same as above.
S-10	45-47	2.0/1.0	BKG	SAND, poorly graded as above. SM	5/5/9/14	Same as above.
S-11	50-52	2.0/1.2	BKG	SAND, poorly graded as above. SM	6/10/14/28	Same as above.
S-12	55-57	2.0/1.4	BKG	SAND, poorly graded as above except moist. SM	14/12/14/18	Same as above.
S-13	60-62	2.0/1.1	BKG	SAND, poorly graded as above except moist to Saturated . SM	6/10/14/27	Same as above.
S-14	65-67	2.0/1.1	BKG	(65.0-65.4') SAND, same as above, Saturated . SM (65.4-66.1') SANDY GRAVEL, well graded, sand is coarse to fine, subrounded, medium dense, saturated, light tan to tan. GW	4/4/7/12	Analytical sample collected. Grain size analysis performed-->SP PID=BKG and LEL=0/21.
S-15	70-72	2.0/1.3	BKG	(70.0-70.6') SAND, moderately poorly graded, coarse to fine with trace (~10%) gravel and trace (~10%) fines, subrounded, medium dense to loose, saturated, tan. SP-SM (70.6-71.3') SILT and SILTY SAND, poorly graded, fine, subrounded, stiff and medium dense, saturated, dark tan to brown. SM-ML	12/6/6/8	PID=BKG and LEL=0/21.
				BOE at 72'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G6M-92-05X	
CLIENT: AEC			DATE STARTED: 6/15/92			GROUP: 6 (Moore Air Field-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/16/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10"			PID METER: Model 580A OVM	
GROUND ELEV.: 266.4'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 70'	
LOGGED BY: NWH			CHECKED BY: BJR			WATER TABLE BGS: 62'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	BKG	(0-0.4') Topsoil, brown, organic. (0.4-1.5') SAND, well graded, some (~20%) gravel (1.0" max) and trace (~5%) silt, subangular, medium dense, damp, 10YR5/6 Munsell yellowish brown. SW	3/4/8/9	2" spoon.	
S-2	5-7	2.0/1.5	BKG	SAND, moderately well graded, trace (~10%) gravel (1.0" max) and trace (~5%) silt, subangular, loose, damp, 10YR4/4 Munsell dark yellowish brown. SW	2/3/3/4	2" spoon.	
S-3	10-12	2.0/1.0	BKG	SAND, poorly graded, fine to medium with trace (~5%) gravel (1.0" max), subangular, medium dense, damp, 10YR6/4 Munsell light yellowish brown. SP	5/10/10/14	2" spoon.	
S-4	15-17	2.0/1.2	BKG	SAND, well graded, some (~20%) 0.5" max gravel and trace (~5%) 2.0" max gravel, subangular, medium dense, damp, 10YR7/3 Munsell very pale brown. SW	4/5/10/10	2" spoon.	
S-5	20-22	2.0/0.8	BKG	SAND, same as above, except loose. SW	3/4/5/8	2" spoon.	
S-6	25-27	2.0/1.1	BKG	SAND, poorly graded, medium with trace (~2%) gravel (<0.5"), subrounded, loose, damp, 10YR7/3 Munsell very pale brown. SP	2/1/4/5	2" spoon.	
S-7	30-32	2.0/1.1	BKG	SAND, same as above. SP	2/2/8/5	2" spoon.	
S-8	35-37	2.0/0.5	BKG	SAND, poorly graded, fine to medium with some (~30%) gravel (>2.0"), subrounded, medium dense, damp, 10YR8/3 Munsell very pale brown. SP	10/7/7/10	2" spoon.	
S-9	40-42	2.0/0.5	BKG	SAND, same as above. SP	8/8/10/10	2" spoon.	
S-10	45-47	2.0/1.5	BKG	SAND, moderately well graded, fine to medium with some (~20%) coarse sand and trace (~5%) gravel (0.5" max), subrounded, medium dense, damp, 10YR8/3 Munsell very pale brown. SW-SP	4/5/6/14	2" spoon.	

SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G6M-92-05X

(continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-11	50-52	2.0/1.6	BKG	SAND, poorly graded, medium with some (~20%) fine sand and trace (~5%) gravel (0.5" max), subrounded, medium dense, damp, 10YR8/3 Munsell very pale brown. SP	3/9/14/15	2" spoon.
S-12	55-57	2.0/1.6	BKG	SAND, same as above except with trace (~2%) coarse sand. SP	3/6/8/10	2" spoon.
S-13	60-62	2.0/1.2	BKG	SAND, well graded, fine to medium with some (~20%) coarse sand and little (~10%) gravel (0.5" max), subrounded, medium dense, Saturated, at spoon head, 10YR6/3 Munsell pale brown. SW	5/14/14/17	2" spoon.
S-14	62-64	2.0/1.6	BKG	SAND, moderately well graded, little (~10%) gravel (0.5" max), subrounded, medium dense, sat., 10YR6/3 Munsell pale brown, silty fine sand lens at 62.8', some sorting into ~1.0" layers of coarser sand. SP/SW	3/10/12/19	Analytical sample collected. Grain size analysis performed-->SP 3" spoon.
S-15	68-70	2.0/1.7	BKG	SAND, same as above with some dark brown streaks at 69.7', dense. SP/SW	4/20/28/31	2" spoon.
				BOE at 70'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: G6M-92-06X	
CLIENT: AEC		DATE STARTED: 6/16/92			GROUP: 6 (Moore Air Field)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/17/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10"			PID METER: Photovac Microtip	
GROUND ELEV.: 261.6'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 63'	
LOGGED BY: RRR		CHECKED BY: BJR			WATER TABLE BGS: 55'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0.5-2.5	2.0/1.5	BKGD	Drilled through 0.5' of concrete. (0.5-2.5') SILTY SAND, poorly graded, coarse to fine with little (15-20%) fines, subangular, loose, dry, tan to yellow. SM	5/5/5/5	PID=BKG and LEL=0/20.
S-2	5-7	2.0/1.3	BKGD	(5.0-5.4') SILTY SAND, poorly graded as above. SM (5.4-6.3') SAND, poorly graded, coarse to medium with little (~15%) gravel and trace (~5%) fines, subangular, medium dense, dry, mottled tan. SP	5/6/5/7	PID=BKG and LEL=0/17. Stopped drilling 6/16/92 and restarted drilling at 0800 on 6/17/92.
S-3	10-12	2.0/1.3	BKGD	SAND, same as above. SP	4/7/5/5	PID=BKG and LEL=0/20.
S-4	15-17	2.0/1.4	BKGD	SAND, same as above except slightly finer, loose. SP-SM	5/5/5/7	Same as above.
S-5	20-22	2.0/1.3	3.0	SAND, same as above except damp. SP-SM	4/5/4/8	PID=BKG and LEL=0/21.
S-6	25-27	2.0/1.6	0.4	SAND, poorly graded, medium to fine with little (15-20%) coarse, little (~15%) fines, and 5-10% gravel, subangular to subrounded, loose to medium dense, damp, tan. SP-SM	6/5/7/17	Same as above, and readings on tip attributed to moisture.
S-7	30-32	2.0/1.3	BKGD	SILTY SAND, same as above except 20-25% fines. SM	6/8/12/20	PID=BKG and LEL=0/21.
S-8	35-37	2.0/1.3	BKGD	SILTY SAND, same as above. SM	10/14/16/22	PID=BKG and LEL=1/21.
S-9	40-42	2.0/1.2	BKGD	SILTY SAND, same as above. SM	6/8/10/12	Same as above.
S-10	45-47	2.0/1.4	BKGD	SILTY SAND, poorly graded, med. to fine with little (~15%) coarse and some (20-25%) fines, subangular, dense, damp to moist, tan to yellow. SM	18/16/20/22	PID=BKG and LEL=0/21.

SOIL BORING LOG - FORT DEVENS, MA.
BORING NO.: G6M-92-06X

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-11	50-52	2.0/1.4	8KGD	SILTY SAND, same as above except trace (~5%) coarse gravel, moist. SM	16/16/18/20	Same as above.
S-12	55-57	2.0/1.5	8KGD	SILTY SAND, same as above except Saturated . SM	20/12/27/26	Analytical sample collected. 2" spoon. Grain size analysis performed-->SP. Water at 55'. PID=8KG and LEL=0/21. Draeger tube tests for benzene and 1,1,1-TCA from 52-55' had no detects.
S-13	60-62	2.0/1.3	8KGD	Silty SAND same as above except very loose. SM	1/1/1/6	PID=8KG and LEL=0/21.
				BOE at 63'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G6M-92-07X	
CLIENT: AEC			DATE STARTED: 6/24/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/25/92			PROTECTION: Modified D	
METHOD: HSA Maherksman			BORING DIAMETER: 10"			PID METER: Microtip	
GROUND ELEV.: 264.4'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 65.2'	
LOGGED BY: RRR			CHECKED BY: DSP			WATER TABLE BGS: 57.1'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
	0-1			(0-0.4') ASPHALT, dry, 10YR2/1 Munsell black (0.4-1.0') SUBBASE, asphaltic concrete, dry, 10YR4/1 Munsell dark gray			
S-1	1-3	2.0/2.0	98	(1.4-2.3') SAND, poorly graded, medium to fine, 10-15% fines, 5-10% coarse subangular gravel, medium dense, dry, 10YR2/2 Munsell dark brown to black SP (2.3-3.0') SAND, poorly graded, same as above, except 10YR5/3 Munsell Brown SP	5/8/7/9	3" spoon samples split with MEP, VOC, TPHC, Lead PID=8KGD	
S-2	5-7	2.0/1.5	26	(5.0-5.8') SAND, poorly graded, same as 2.3-3.0', except loose, 10YR5/3 Munsell brown SP (5.8-7.0') SAND, well graded, fine to coarse, 5-10% fines, loose, dry, 10YR6/4 Munsell light brown SW	4/5/5/6	PID=8KGD	
S-3	10-12	2.0/1.5	7	SAND, well graded, fine to coarse, 5-10% fines, med. dense, dry, 7.5YR6/4 Munsell light brown SW	4/5/6/8	2" spoon, VOC, TPHC, Lead, PID=8KGD	
S-4	15-17	2.0/1.4	8KGD	SAND, poorly graded, fine to medium, 5-10% fines, subrounded gravel, loose, dry, 7.5YR6/4 Munsell light brown SP-SW	2/2/4/5	PID=8KGD	
S-5	20-22	2.0/1.9	1.0	SAND, same as S-4 SP-SW	2/3/5/5	PID=8KGD	
S-6	25-27	2.0/1.8	8KGD	SAND, same as S-4, except for silt layer, plastic, firm, dry SP-SW	3/6/10/12	3" spoon split w/EPA VOC, TPHC, and Lead, PID=8KGD	
S-7	30-32	2.0/1.5	8KGD	SAND, poorly graded, fine, 10-15% silt, 5-10% subrounded gravel, loose, dry, 7.5YR6/4 Munsell light brown SP	4/4/6/11	PID=8KGD	
S-8	35-37	2.0/1.5	4.2	SAND, poorly graded, same as S-7 SP	4/7/8/10	PID=8KGD	
S-9	40-42	2.0/1.3	13.0	SAND, well graded, fine to coarse, <5% fines, 5-10% subrounded gravel, medium dense, dry, 7.5YR6/4 Munsell light brown SW	3/8/9/13	TPHC, VOC, and Lead analyticals PID=8KGD	
<div style="text-align: right;"> ABB ENVIRONMENTAL SERVICES, INC. </div>							

SOIL BORING LOG - FORT DEVENS, MA.
BORING NO.: G6M-92-07X

(continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-10	45-47	2.0/1.4	12.4	SAND, well graded, same as S-9 SW	4/5/9/17	PID=BKGD
S-11	50-52	2.0/1.5	7.8	SAND, poorly graded, medium to fine, medium dense, damp, 7.5YR6/4 Munsell light brown SP	6/9/14/16	PID=BKGD
S-12	55-57	2.0/1.5	3.3	SAND, poorly graded, 0-5% fines, medium dense, damp 7.5YR6/4 Munsell light brown SP	4/7/7/14	PID=BKGD Grain-size analysis performed -> SP
S-13	60-62	2.0/1.8	BKGD	SAND, well graded, fine to coarse, medium dense, saturated, 7.5YR6/4 Munsell light brown SW	4/6/6/13	TPHC, VOA, Lead split with EPA PID=BKGD
				Bottom of Exploration at 65.2'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: G6M-92-08X	
CLIENT: AEC		DATE STARTED: 6/22/92				GROUP: 6	
CONTRACTOR: D. L. Maher		DATE COMPLETED:				PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10"				PID METER: Microtip	
GROUND ELEV.: 263.21'		REFERENCE PT. ELEV.: NA				TOTAL DEPTH: 63'	
LOGGED BY: RRR		CHECKED BY: DSP				WATER TABLE BGS: 54.7'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
	0-1			ASPHALT AND CONCRETE			
S-1	1-3	2.0/1.5	BKGD	SAND, well graded, fine to coarse, 20-30% gravel, 10-15% cobbles, dense, dry, 10YR7/6 Munsell yellow SW	10/27/21/25	Rock caught in shoe of spoon analyticals collected PID=BKGD, LEL/O2=0/21	
S-2	5-7	2.0/0.6	BKGD	SAND, well graded, same as S-1, except medium dense SW	8/8/9/10	PID=BKGD, LEL/O2=0/21 Rock caught in shoe of spoon	
S-3	10-12	2.0/1.4	BKGD	(10.0-11.0') SAND, poorly graded, medium to fine, 10-15% subangular to subrounded gravel, 10-15% fines, medium dense, dry SP (11.0-11.1') SANDY SILT, fine sand, soft, dry, 5Y4/3 Munsell olive ML (11.1-11.4') SAND, poorly graded, same as 10.0-11.0' SP	8/9/4/2	PID=BKGD, LEL/O2=0/21	
S-4	15-17	2.0/0.4	BKGD	GRAVELLY SAND well graded, coarse to fine, 20-40% cobbles, loose, dry, 7.5YR6/4 Munsell light brown SW	4/4/4/5	Poor recovery due to cobble zone at 15' PID=BKGD, LEL/O2=0/21	
				Fewer cobbles 17-18'; encounter cobbles at 19'		PID=BKGD, LEL/O2=0/21	
S-5	20-22	2.0/1.2	BKGD	(20.0-20.2') GRAVELLY SAND well graded, coarse to fine, 20-40% cobbles, medium dense, dry, 7.5YR6/4 Munsell light brown SW (20.2'-21.2') SANDY SILT, fine sand, stiff, dry 5Y4/3 Munsell olive ML	8/6/7/9	PID=BKGD, LEL/O2=0/21	
S-6	25-27	2.0/1.9	BKGD	SANDY SILT, fine sand, stiff, dry ML	9/8/7/9	PID=BKGD, LEL/O2=0/21 Spoon overdriven for maximum recovery, analytical taken VOC, Lead, TPHC	
S-7	30-32	2.0/2.0	BKGD	(30.0-31.0') SANDY SILT, fine sand, stiff, dry, 5Y4/3 Munsell olive ML (31.0-31.2') CLAY, firm, moist, 5GY4/1 Munsell dark greenish gray CL (30.0-31.0') SANDY SILT, same as 30.0-31.0' ML	4/5/8/7	PID=BKGD, LEL/O2=0/21	

SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G6M-92-08X

(continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-8	35-37	2.0/1.8	BKGD	(35.0-35.4') SANDY SILT, fine, stiff, dry, 5Y4/3 Munsell olive (35.4-36.8') SAND, poorly graded, fine to medium, 10-20% fines, loose, dry, 7.5YR6/4 Munsell light brown ML SP	4/5/5/7	Draeger tubes for 1,1,1-TCA - no detects PID=BKGD, LEL/O2=0/21
S-9	40-42	2.0/1.6	BKGD	(40.0-41.0') SAND, poorly graded, fine to medium, 10-20% fines, loose, dry, 7.5YR6/4 Munsell light brown (41.0-42.0') SILTY SAND, poorly graded, 35-45% fines loose, damp 7.5YR6/4 Munsell light brown SP SM	8/4/5/6	PID=BKGD, LEL/O2=1/21
S-10	45-47	2.0/1.7	BKGD	SILTY SAND, same as above, except medium dense grading to SAND same as 40.0-41.0, except medium dense SM SM/SP	6/6/5/7	PID=BKGD, LEL/O2=1/21
S-11	50-52	2.0/1.3	BKGD	SILTY SAND, poorly graded, same as 41.0-42.0' except medium dense SM	6/7/12/15	PID=BKGD, LEL/O2=1/21
S-12	55-57	2.0/2.0	BKGD	SILTY SAND, poorly graded, same as above saturated SM	5/6/8/11	Analyticals collected. Water encountered at 54.7' 1500hrs 6/22/92. PID=BKGD, LEL/O2=1/21
S-13	60-62	2.0/1.2	BKGD	SILTY SAND, poorly graded, same as above, saturated SM	6/3/5/4	PID=BKGD, LEL/O2=1/21 Grain size sample collected -> SM
				Bottom of Exploration at 63.0'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G6M-92-09X	
CLIENT: AEC			DATE STARTED: 6/18/92			GROUP: 6	
CONTRACTOR: L. Maher			DATE COMPLETED: 6/19/92			PROTECTION: Modified D	
METHOD: HSA Maherksman			BORING DIAMETER: 10"			PID METER: Microtip 10.6ev	
GROUND ELEV.: 258.6'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 58'	
LOGGED BY: R. Donagan			CHECKED BY: RRR			WATER TABLE BGS: 49'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.9	BKGD	(0-0.6') PEAT, organic soil OL (0.6-1.1') SILTY SAND, well graded, fine to coarse, 10-15% fines, medium dense, dry, 7.5YR3/4 Munsell dark SM (1.1-1.9') SAND, poorly graded, medium to fine, 10-15% fines, medium dense, dry, 5YR6/4 to 5YR3/3 Munsell light reddish brown to dark reddish brown SP	7/7/7/7	PID = BKGD, LEL/02 = 0/21	
S-2	5-7	2.0/1.8	BKGD	SAND, poorly graded, medium to fine, 10-15% fines, loose, dry, 5YR6/4 to 5YR3/3 Munsell light reddish brown to dark reddish brown SP	4/4/3/4	PID = BKGD, LEL/02 = 0/21	
S-3	10-12	2.0/1.6	BKGD	SAND, poorly graded, same as above except medium dense SP	4/8/6/10	PID = BKGD, LEL/02 = 0/21	
S-4	15-17	2.0/1.4	BKGD	SAND, poorly graded, same as above except loose SP	3/4/5/7	PID = BKGD, LEL/02 = 0/21	
S-5	20-22	2.0/1.2	BKGD	(20.0-22.8') SAND, same as above SP (22.8-23.2') SAND, poorly graded, fine to medium, subrounded, loose, dry, 7.5YR6/4 Munsell light brown SP	3/3/6/8	PID = BKGD, LEL/02 = 0/21	
S-6	25-27	2.0/1.6	BKGD	(25.0-25.3') SAND, same as 22.8-23.2' SP (25.3-26.6') SILTY SAND, poorly graded, fine to medium, medium dense, moist, 7.5YR6/4 Munsell light brown, 3" lense of sandy silt SM	8/11/13/13	PID = BKGD, LEL/02 = 0/21	
S-7	30-32	2.0/2.0	BKGD	SANDY SILT, 30% fine to medium sand, stiff, 7.5YR6/4 Munsell light brown ML	6/6/8/10	PID = BKGD, LEL/02 = 0/21	
S-8	35-37	2.0/1.5	BKGD	(35.0-35.5') SANDY SILT, same as above ML (35.5-36.5') SILTY SAND, poorly graded, medium to fine, 10-20% fines, medium dense, dry, 7.5YR6/6 Munsell pinkish gray SM	5/8/8/12	PID = BKGD, LEL/02 = 0/21	
S-9	40-42	2.0/2.0	BKGD	SILTY SAND, poorly graded, medium to fine, 10-20% fines, medium dense, moist, 7.5YR6/2 to 7.5YR3/2 Munsell pinkish gray to dark brown SM	8/10/12/14	PID = BKGD, LEL/02 = 0/21	
S-10	45-47	2.0/2.0	BKGD	SILTY SAND, poorly graded, fine, medium dense, moist 7.5YR5/2 Munsell brown SM	6/11/11/12	PID = BKGD, LEL/02 = 0/21	

SOIL BORING LOG - FORT DEVENS, MA.

BORING NO.: G6M-92-09X

(CONTINUED)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-11	50-52	2.0/2.0	BKGD	SILTY SAND, poorly graded, fine, medium dense, saturated, 7.5YR5/2 Munsell brown SM	10/12/12/16	PID = BKGD, LEL/02 = 0/21
S-12	55-57	2.0/2.0	BKGD	SILTY SAND, same as S-11 SM	5/10/12/12	PID = BKGD, LEL/02 = 0/21
				Bottom of Exploration at 58'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G6M-92-10X	
CLIENT: AEC			DATE STARTED: 6/24/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/24/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10"			PID METER: TE 10.6 eV	
GROUND ELEV.: 227.2'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 17.0'	
LOGGED BY: GF			CHECKED BY: DSP			WATER TABLE BGS: 10.6'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.7	BKGD	SAND, well graded, coarse to fine, 0-10% fines, 0-5% subrounded gravel, loose, 10YR7/3 to 10YR5/3 Munsell very pale brown to brown SW	2/2/3/4	PID = BKGD, LEL/02 = 0/21	
S-2	5-7	2.0/2.0	BKGD	SAND, well graded, same as above except damp, 10YR7/3 very pale brown SW	2/2/3/4	PID = BKGD, LEL/02 = 0/21	
S-3	10-12	2.0/2.0	BKGD	SANDY SILT, well graded, coarse to fines, 50-60% fines, 0-5% subrounded gravel, medium dense, saturated at 10.6', 10YR6/4 to 10YR7/3 Munsell light yellowish brown to very pale brown ML	3/5/7/4	PID = BKGD, LEL/02 = 0/21 Grain size analysis performed - ML	
S-4	15-17	2.0/2.0	BKGD	SANDY SILT, well graded, same as S-3, except 10YR6/4 Munsell yellowish-brown ML	3/5/6/3		
				Bottom of Exploration at 17.0'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: G6M-92-11X	
CLIENT: AEC			DATE STARTED: 6/25/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/25/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" hole			PID METER: 10.6ev TE	
GROUND ELEV.: 223.2'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 17.0'	
LOGGED BY: GF			CHECKED BY: DSP			WATER TABLE BGS: 10.6'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5'	BKGD	SAND, well graded, coarse to fine, 0-10% fines, 0-5% subrounded gravel, loose, dry, 10YR6/4 to 5YR5/3 Munsell light yellowish-brown to reddish-brown SW	3/3/2/2	PID = BKGD, LEL/02 = 0/21	
S-2	5-7	2.0/2.0	BKGD	SILTY SAND, well graded, coarse to fine, 30-40% fines, 0-5% subrounded gravel, medium dense, dry, 2.5YR6/4 to 10YR4/4 Munsell dark yellowish-brown to dark yellowish-brown SM	3/6/6/5	PID = BKGD, LEL/02 = 0/21	
S-3	10-12	2.0/0.0	BKGD	No recovery, saturated at approximately 10.6'	7/8/9/9	PID = BKGD, LEL/02 = 0/21	
S-4	12-14	2.0/2.0	BKGD	SILTY SAND, same as S-2, except saturated, 10YR5/4 Munsell yellowish-brown SM	5/5/8/8	PID = BKGD, LEL/02 = 0/21	
S-5	15-17	2.0/1.7	BKGD	SILTY SAND, same as above, except loose SM	4/4/5/8	PID = BKGD, LEL/02 = 0/21	
				Bottom of Exploration at 17.0'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: G6M-93-12X	
CLIENT: AEC			DATE STARTED: 6/1/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 20'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: ~10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.3	BG	SAND, poorly graded, fine to medium, 0 - 5% gravel, 0 - 5% fines, dense, dry, dark brown	7-14-17-12	SP	
S-2	5-7	2.0/1.7	BG	Silty SAND, poorly graded, fine, 20 - 40% fines, medium dense, damp to moist, yellowish brown	7-6-8-11	SM-ML	Rusty discoloration. Tip of spoon is wet.
S-3	10-12	2.0/1.5	BG	Sandy SILT, 20 - 45% fine sand, stiff, saturated, dark yellowish brown	5-6-7-8	ML-SM	
S-4	15-17	2.0/1.5	BG	Sandy SILT, as in S-3.	6-6-9-9	ML-SM	
BOE at 20'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: G6M-93-13X	
CLIENT: AEC			DATE STARTED: 6/1/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/1/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 19'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: ~10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.0	BG	<u>Top 0.5'</u> : SAND and GRAVEL. <u>Bottom 1.5'</u> : SAND, poorly graded, very fine, 12 - 20% fines, med dense, damp, light olive brown (2.5Y5/3)	8-10-11-13	GW/SW SM	
S-2	5-7	2.0/1.6	BG	<u>Top 0.5'</u> : SILT, damp, light olive brown <u>Bottom 1.5'</u> : SAND, poorly graded, fine, 12 - 20% fines, medium dense, damp, yellowish brown (10YR5/4)	6-7-8-9	ML SM	5% rust discoloration
S-3	10-12	2.0/2.0	1.0	Sandy SILT/silty SAND, poorly graded, 20 - 55% fines, med dense, saturated, dark yellowish brown (10YR4/4)	6-10-12-16	SM-ML	5% rust discoloration.
S-4	15-17	2.0/1.8	BG	Sandy SILT/silty SAND, poorly graded, 20 - 55% fines, loose, saturated, dark yellowish brown (10YR4/4)	4-5-5-5	SM-ML	5% rust discoloration.
BOE at 19'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-94-15A (p. 1 of 2)	
CLIENT: AEC			DATE STARTED: 8/8/94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580 B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 44.5'	
LOGGED BY: R. Rustad			CHECKED BY:			WATER TABLE BGS: 36'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
s-1	0-2	2.0/1.6	0.2	Top 0.6': Silty SAND, poorly graded, fine, 5 - 10% coarse, loose, dry, very dark gray (10YR3/1) Next 0.3': SAND, well graded, fine to medium, 10% coarse, 10% silt, loose, dry, yellowish brown (10YR5/6) Next 0.7': SAND, poorly graded, fine, 10 - 20% medium, 5% silt, loose, dry, very pale brown	3-3-3-3	SP-SM SW SP	
s-2	5-7	2.0/1.9	0.1	SAND, poorly graded, fine, 10 - 20% medium, 5% silt, loose, dry, very pale brown	7-3-5-7	SP	
s-3	10-12	2.0/1.3	0.2	SAND, poorly graded, medium to coarse, 10% fines, loose, dry, light brown (7.5YR6/4)	3-3-4-6	SP	
s-4	15-17	2.0/1.4	0.0	SAND, poorly graded, fine to medium, < 5% coarse, < 5% silt, loose, dry, light brown (7.5YR6/4)	4-4-6-7	SP	
s-5	20-22	2.0/2.0	0.0	SAND, poorly graded, fine, < 5% medium, 5% silt, loose, dry, pinkish gray (7.5YR7/2)	4-4-4-5	SP	
s-6	25-27	2.0/1.8	0.0	SAND, poorly graded, fine, < 5% medium, 5% silt, loose, dry, pinkish gray (7.5YR7/2)	7-7-8-8	SP	

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-94-15A (p. 2 of 2)	
CLIENT: AEC			DATE STARTED: 8/8/94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580 B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 44.5'	
LOGGED BY: R. Rustad			CHECKED BY:			WATER TABLE BGS: 36'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-7	30-32	2.0/2.0	0.0	<u>Top 0.3'</u> : SAND, as in S-6 <u>Next 0.8'</u> : Silty SAND, poorly graded, fine, 10% silt, medium dense, wet <u>Next 0.2'</u> : SAND, poorly graded, fine, moist <u>Bottom 0.7'</u> : Silty SAND, poorly graded, fine, 10 - 15% silt, medium dense, moist, brown (7.5YR5/3)	7-8-9-13	SP SM SP SP-SM	iron staining
S-8	35-37	2.0/1.9	0.0	<u>Top 0.9'</u> : SAND, poorly graded, fine, 5 - 10% silt, medium dense, wet <u>Next 0.6'</u> : SILT to sandy SILT, 10 - 20% fine sand, gray <u>Next 0.1'</u> : Clayey SILT <u>Bottom 0.3'</u> : SAND, poorly graded, fine, wet	7-5-6-9	SP SM SM-CL SP	iron staining
S-9	40-42	2.0/2.0	--	<u>Top 1.2'</u> : Sandy SILT, 10 - 15% clay, loose to medium dense, wet, grayish brown (10YR5/2) <u>Bottom 0.8'</u> : Silty SAND, poorly graded, fine, 15 - 20% silt, medium dense to loose, wet, brown (7.5YR5/3)	11-8-11-12	SM SP-SM	
BOE at 44.5'							

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SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-94-16X (p. 2 of 2)	
CLIENT: AEC			DATE STARTED: 8-11-94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 44'	
LOGGED BY: R. Rustad			CHECKED BY:			WATER TABLE BGS: 35'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-7	30-32	2.0/1.7	0.0	SAND, poorly graded, fine to medium, < 5% coarse, < 5% fines, loose, dry, very pale brown (10YR7/4)	4-6-7-8	SP	
S-8	35-37	2.0/2.0	0.0	Top 0.6': Silty SAND, poorly graded, fine sand, < 5% med, 15 - 20% silt, loose, wet Bottom 1.4': SAND, poorly graded, fine, 5% medium, < 5% fines, loose, wet, yellowish brown (10YR5/6)	4-6-10-10	SM SP	iron staining at contact between lithologies and within bottom 1.4'
S-9	40-42	2.0/2.0	0.0	Top 1.8': SAND, poorly graded, fine, 5 - 10% silt, loose, wet, yellowish brown (10YR5/6) Bottom 0.2': SAND, poorly graded, fine, < 5% medium, < 5% fines, loose, wet, yellowish brown (10YR5/6)	5-7-9-10	SP-SM SP	extensive iron staining
BOE at 44'							

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SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-94-17A (p. 2 of 2)	
CLIENT: AEC			DATE STARTED: 8/10/94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 44.0'	
LOGGED BY: D. Pierce			CHECKED BY:			WATER TABLE BGS: 36.3'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-7	29-31	2.0/1.6	0.0	SAND, poorly graded, f to med, < 5% fines, damp, med dense, very pale brown (10YR8/3)	8-9-9-9	SP	finely stratified
S-8	34-36	2.0/1.8	0.0	Top 1.0': Sandy SILT, slightly plastic, 10 - 20% f sand, very stiff, saturated, very pale brown (10YR7/3) Next 0.2': SAND, poorly graded, med to f, 5 - 10% nonplastic fines, med dense, saturated, banded colors dark reddish brown (5YR2.5/2 and yellowish red (5YR5/6). Next 0.3': Sandy SILT, as in top 1.0'. Bottom 0.3': Silty SAND, fine, 20 - 40% slightly plastic fines, very stiff, saturated, reddish yellow (7.5YR8/6)	6-7-11-12	ML SP-SM ML SM	finely stratified
S-9	39-41	2.0/2.0	0.0	Top 0.3': Sandy SILT, slightly plastic, 10 - 20% f sand, stiff, saturated, lt yellowish brn (2.5Y6/3) Next 0.2': Silty CLAY, slightly to mod. plastic, stiff, saturated, lt yellowish brown (2.5Y6/3) Bottom 1.5': Silty SAND, fine, 20 - 50% slightly plastic fines, med dense, saturated, brownish yellow (10YR6/6) with some color banding (esp. 39.5' to 39.9'), yellowish red (5YR5/6)	9-6-6-8	ML CL SM-ML	
	41-44			Silty SAND	logged from auger cuttings	SM-ML	
BOE at 44'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-94-18X (p. 1 of 6)	
CLIENT: AEC			DATE STARTED: 8/12/94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 92.75'	
LOGGED BY: R. Rustad, D. Pierce			CHECKED BY:			WATER TABLE BGS: 11.9'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.6	0.3	Top 0.5': SAND, well graded, f to c, 10% gravel, fill. Next 0.8': SAND, well graded, f to c, 5% gravel, 5 - 10% silt, very loose, dry, dk brn (10YR3/3) Bottom 0.3': SAND, poorly graded, f to med, < 5% fines, very loose, dry, pale brown (10YR6/3)	2-2-5-4	SW SW SP	organic
S-2	2-4	2.0/1.3	0.0	SAND, poorly graded, fine to med, < 5% fines, very loose, dry, pale brown (10YR6/3)	3-4-4-5	SP	
S-3	4-6	2.0/1.7	0.0	Top 1.1': SAND, poorly graded, f to med, < 5% fines, very loose, dry, pale brn (10YR6/3). Next 0.2': Sandy SILT, poorly graded, 20 - 30% f sand, very loose, dry, gray brown (10YR5/2) Bottom 0.4': SAND, poorly graded, f to med, 10% coarse, < 5% fines, loose, dry, lt yellowish brown (10YR6/2)	3-3-6-7	SP SM SP	organic black sand at 1.3' to 1.4'
S-4	6-8	2.0/2.0	11.2	Top 1.3': SAND, poorly graded, fine, < 5% fines, loose, dry, very pale brn (10YR7/3). Bottom 0.7': Silty SAND, poorly graded, fine, 20 - 30% fines, loose, dry, pale brown (10YR6/3)	12-6-8-10	SP SM	finely laminated finely laminated with a slightly coarser lens from 7.6'-7.7' bgs
S-5	8-10	2.0/1.9	192.0	Top 0.9': Silty SAND to sandy SILT, poorly graded, 40 - 50% f sand, 50 - 60% silt, med dense, moist Next 0.6': Sandy SILT grading into clayey SILT, slightly plastic, 5% f sand, wet, lt olive brown (2.5Y5/3) Bottom 0.4': Silty SAND, poorly graded, fine, 20% silt, med dense, wet, brown (10YR5/3)	10-10-12-12	SM ML SM-ML	extensive orange iron staining from 9.4-9.6' bgs
S-6	10-12	2.0/1.7	NR	Silty SAND, fine, 20-40% nonplastic to slightly plastic fines, med dense, wet, very pale brn (10YR9/4) with scattered orange-brown spots	8-7-7-8	SM	
S-7	12-14	2.0/2.0	NR	Top 1.4': Silty SAND, fine, 20 - 40% grading into 12 - 20% nonplastic to slightly plastic fines, med dense, wet, very pale brn (10YR9/4) with orange-brn laminae. Next 0.2': Clayey SILT, slightly plastic, < 10% f sand, dense, moist, lt brownish gray (2.5Y6/2); overlain by 1/8" layer of orange-brn SAND. Bottom 0.4': Silty SAND, fine, 20-40% nonplastic fines, loose, moist, brownish yellow (10YR6/4).	6-4-6-8	SM ML SM	
S-8	14-16	2.0/1.6	NR	Silty SAND, fine, 20 - 40% nonplastic fines, med dense (loose in some layers), wet, laminated, alternating lt brownish gray (2.5Y6/2) and yellowish red (5YR4/6)	12-10-8-11	SM	

SOIL BORING LOG - FORT DEVENS, MA.					PROJECT NO.: 6917.07		BORING NO.: G6M-94-18X (p. 2 of 6)	
CLIENT: AEC				DATE STARTED: 8/12/94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring				DATE COMPLETED:			PROTECTION: Modified D	
METHOD: drive & wash				BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:				REFERENCE PT. ELEV.:			TOTAL DEPTH: 92.75'	
LOGGED BY: R. Rustad, D. Pierce				CHECKED BY:			WATER TABLE BGS: 11.9'	
SAMPLE DEPTH NO. (ft.)		PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS	
S-9	16-18	2.0/2.0	NR	Top 0.6': Silty SAND, as in S-8 Next 0.9': Silty SAND, fine, 12 - 25% nonplastic fines, med dense, saturated, very pale brown (10YR7/4) with scattered orange-brown spots (16.0' - 17.5' bgs) accompanied by unidentified fibers. Next 0.1': Silty SAND with ~10% angular gravel to 3/8" max Bottom 0.4': Silty SAND, as in S-8	9-9-11-11	SM SM SM SM		
S-10	18-20	2.0/2.0	16.9	Silty SAND, fine, 12 - 20% fines, med dense, wet, lt yellowish brn (10YR6/4)	12-10-10-11	SM		
S-11	20-22	2.0/1.0	6.4	Silty SAND, as in S-10	13-8-10-9	SM		
S-12	22-24	2.0/1.3	11.4	Silty SAND, fine, 12-40% fines (silt content varies with depth), med dense, wet, lt yellowish brn (10YR6/4)	7-6-9-10	SM-ML		
S-13	24-26	2.0/2.0	14.2	Top 1.0': Silty SAND, as in S-11 Next 0.6': Interlayered clayey SILT and silty SAND, lt yellowish brown (10YR6/4) interlayered with orange-brown. Bottom 0.4': SAND, uniform, fine, 5 - 12% fines, med dense, wet, lt yellowish brn (10YR6/4) interlaminated with yellowish red (5YR5/8)	5-5-9-11	SM ML & SM SP-SM		
S-14	26-28	2.0/1.5	44.2	Top 0.7': SAND, uniform, fine, 5 - 12% fines, med dense, wet, lt yellowish frn (10YR6/4). Next 0.3': Sandy SILT, slightly plastic, 10 - 20% f sand, very stiff, wet, lt yellowish brn. Bottom 0.5': SAND, uniform, fine, 5 - 12% fines, med dense, wet, reddish yellow (7.5YR6/6)	7-11-11-11	SP-SM ML SP-SM	highest PID value in this layer	
S-15	28-30	2.0/1.3	13.6	Silty SAND, fine, 12 - 20% nonplastic fines, med dense, wet, lt yellowish brn (10YR6/4), infrequent and non-distinct pink laminae (7.5YR7/4)	4-6-8-12	SM		
S-16	30-32	2.0/1.7	0.0	Top 1.1': Silty SAND, fine, 15 - 25% nonplastic fines, med dense, wet, lt yellowish brn (10YR6/4). Next 0.1': Clayey SILT, slightly plastic, 10 - 20% f sand, very stiff, lt yellowish brn (2.5Y6/3). Bottom 0.5': Silty SAND, fine, 15 - 25% nonplastic fines, med dense, wet, lt yellowish brn (10YR6/4) with bands of reddish yellow (7.5YR6/6)	7-8-9-10	SM ML SM		
S-17	32-34	2.0/1.5	0.0	Silty SAND, fine, 15 - 25% nonplastic fines, med dense, wet, lt yellowish brn (10YR6/4) with bands of reddish yellow (7.5YR6/6)	4-5-7-12	SM		

SOIL BORING LOG - FORT DEVENS, MA.					PROJECT NO.: 6917.07		BORING NO.: G6M-94-18X (p. 3 of 6)	
CLIENT: AEC			DATE STARTED: 8/12/94			STUDY AREA: 50		
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D		
METHOD: drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM		
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 92.75'		
LOGGED BY: R. Rustad, D. Pierce			CHECKED BY:			WATER TABLE BGS: 11.9'		
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS	
S-18	34-36	2.0/1.5	1.6	Silty SAND, fine, 12 - 20% nonplastic fines, med dense, wet, pale yellow (2.5Y8/3) with faint laminae of reddish yellow (7.5YR6/6), particularly in 35.6'-35.7' bgs	6-8-8-15	SM		
S-19	36-38	2.0/1.7	0.0	Silty SAND, similar to S-18, except layering mostly indistinguishable	5-10-12-14	SM		
S-20	38-40	2.0/1.6	0.0	Top 0.6': Silty SAND, as in S-19 Bottom 1.0': SAND, poorly graded, fine, 5 - 12% fines, med dense, wet, very pale brown (10YR7/3)	3-7-9-10	SM SP-SM		
S-21	40-42	2.0/1.9	0.0	Top 1.6': SAND, poorly graded, fine, 5 - 12% fines, med dense, wet, very pale brown (10YR7/3) with laminae and layers of reddish yellow (7.5YR6/8) Bottom 0.3': CLAY, moderately to highly plastic, < 10% f sand, very stiff, wet, light olive brn (2.5Y5/3) with very thin laminae of dk reddish brown fine sand (5YR3/3)	6-7-5-7	SP-SM CH		
S-22	42-44	2.0/2.0	0.0	Top 1.7': SAND, poorly graded, fine, 5 - 12% fines, med dense, wet, very pale brown (10YR7/3) with laminae and layers of reddish yellow (7.5YR6/8) Next 0.1': CLAY, moderately to highly plastic, stiff, wet, lt olive brown (2.5Y5/3). Bottom 0.2': SAND, as in top 1.7'.	4-6-10-16	SP-SM CH SP-SM		
S-23	44-46	2.0/2.0	0.0	Top 0.9': SAND, poorly graded, fine, 5 - 12% fines, med dense, wet, very pale brown (10YR7/3) with laminae and layers of reddish yellow (7.5YR6/8) Bottom 1.1': Interbedded clay and sand. CLAY - mod. to highly plastic, stiff, wet, lt olive brn (2.5Y5/3). SAND - as in above 0.9', in layers 1/8" to 1"	9-4-5-9	SP-SM CH & SP-SM		
S-24	46-48	2.0/2.0	0.0	Top 0.8': SAND, poorly graded, fine, 5 - 12% fines, med dense, wet, light olive brown (2.5Y5/3). Next 0.5': Sandy CLAY, mod. to highly plastic, 35 - 50% f sand, very stiff, wet, lt olive brown (2.5Y5/3). Next 0.3': Clayey SAND, fine, 25 - 50% mod. to highly plastic fines, very stiff, wet, lt olive brown (2.5Y5/6). Next 0.3': Clayey SAND, fine, 15 - 25% moderately plastic fines, very dense, wet, reddish brown (5YR4/4). Bottom 0.1': CLAY, mod. to highly plastic, hard, wet, light olive brown (2.5Y5/3).	10-9-17-21	SP-SM CH-SC SC-CH SC-CH CH		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-94-18X (p. 5 of 6)	
CLIENT: AEC			DATE STARTED: 8/12/94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 92.75'	
LOGGED BY: R. Rustad, D. Pierce			CHECKED BY:			WATER TABLE BGS: 11.9'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-34	66-68	2.0/1.7	0.0	Top 1.5': SAND, poorly graded, fine, 10% fines, loose, wet, very pale brown (10YR7/4) with occasional reddish yellow laminae, micaceous flakes in sand (0.01 - 1.0 mm), angular to subangular grains. Bottom 0.2': SILT, slightly plastic, 5 - 10% f sand, medium dense, wet, gray (10YR5/1).	5-9-14-20	SP-SM SM-SP	
S-35	68-70	2.0/1.4	0.0	Top 0.7': SAND, poorly graded, fine, 5 - 10% fines with occasional reddish laminae, med dense to dense, wet, pale brown (10YR6/3). Next 0.2': Sandy SILT, poorly graded, 15 - 20% f sand, soft to firm, wet, lt brownish gray (10YR6/2). Bottom 0.5': SAND to silty SAND, poorly graded, fine, 10 - 25% silt, loose, wet, grayish brn (10YR5/2)	20-19-7-10	SP-SM SM SP-SM to SM	
S-36	70-72	2.0/1.5	0.0	Sandy SILT, 20 - 30% f sand, medium dense, wet, pale brown (10YR6/3)	9-11-15-14	SM	
S-37	72-74	2.0/1.2	0.0	Sandy SILT, 20 - 30% f sand, medium dense, wet, pale brown (10YR6/3) with thick reddish laminae (coarser texture from 72.5' to 72.6' and 73.0' to 73.1)	7-10-19-17	SM	
S-38	74-76	2.0/1.8	0.0	Sandy SILT, as in S-37, but with thin laminae	2-4-10-10	SM	
S-39	76-78	2.0/1.6	0.0	Top 1.1': Sandy SILT, 20 - 30% fine sand, med dense, wet, pale brown (10YR6/3) with thin reddish laminae - grading over 0.2' into - Bottom 0.5': SAND, poorly graded, fine, 5% med, 5 - 10% silt, med dense, wet, gray (10YR6/1)	5-9-13-20	SM SP-SM	
S-40	78-80	2.0/1.9	0.0	SAND, as in bottom 0.5' of S-39, but with increasing frequency of laminae (5 - 10 per inch)	22-17-10-12	SP-SM	
S-41	80-82	2.0/2.0	0.0	Top 1.7': Silty SAND, poorly graded, f sand, 15 - 20% silt, loose, wet, lt brownish gray (10YR6/2), micaceous, no bedding or laminae. Bottom 0.3': Sandy SILT, slightly plastic, 20 - 30% f sand, loose, wet, gray (10YR5/1).	5-4-7-8	SM SM	
S-42	82-84	2.0/2.0	0.0	Top 1.1': Sandy SILT, as in bottom 0.3' of S-41. Bottom 0.9': Silty SAND to sandy SILT, slightly plastic, 30 - 45% f sand, loose, wet, gray (10YR5/1), some thin laminae present at 83' - 83.2' (pale brown)	3-4-7-8	SM SM-ML	

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-94-18X (p. 6 of 6)	
CLIENT: AEC			DATE STARTED: 8/12/94			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 92.75'	
LOGGED BY: R. Rustad, D. Pierce			CHECKED BY:			WATER TABLE BGS: 11.9'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-43	84-86	2.0/2.0	0.0	Top 0.9': Silty SAND, fine, poorly graded, 15 - 20% silt, med dense, wet, gray (10YR5/1) Bottom 1.1': Silty SAND, as in above 0.9', but including gravel-sized, angular phyllite (5 mm maximum)	5-9-18-20	SM-ML SM-ML	
S-44	86-88	2.0/0.4	0.0	Clayey SILT, plastic, firm, wet, gray (10YR5/1), contains angular phyllite gravel	21-13-16-46	ML-CL	
S-45	88-90	2.0/1.8	0.0	Top 1.1': GRAVEL- to COBBLE-sized phyllite fragments, angular, in a sandy SILT matrix, f to c sand, dense, wet, dk gray (10YR4/1). Next 0.4': Coarse SAND and GRAVEL, 10% med sand, < 5% fines, including subangular phyllite fragments (max size 5 mm). Bottom 0.3': SILT, 5% gravel, 10% f to c sand, very stiff.	18-52-22-7	GM GW ML	
S-46	90-92	2.0/1.8	0.0	Top 0.6': Sandy SILT, 30 - 40% fine sand, med stiff, wet, gray (10YR6/1) Bottom 1.2': Silty SAND, well graded, f to c, 20 - 30% silt, med dense, wet, subangular to subrounded	27-18-12-9	ML SM-ML	
S-47	92-92.5	0.75/0.5	0.0	GRAVEL, well graded, angular, 20% fine to coarse sand, 20% silt. Phyllite cuttings from rollerbit.	33-133/0.15"	GM	
				BOE at 92.75'			

SOIL BORING LOG - FORT DEVENS, MA.					PROJECT NO.: 6917.07		BORING NO.: G6M-95-19X (p. 1 of 3)	
CLIENT: AEC			DATE STARTED: 1/20/95			STUDY AREA: 50		
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 1/24/95			PROTECTION: Modified D		
METHOD: HSA and drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM		
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 87.0'		
LOGGED BY: J. Healey, H. Colby			CHECKED BY:			WATER TABLE BGS: 10.5'		
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS	
S-1	0-2	2.0/1.6	BKG	Top 0.2': Silty SAND, f to med, 30% fines, nonplastic, loose, damp, dk brn Bottom 1.3': SAND, poorly graded, f to med, 10% gravel, 10% fines, med dense, damp, brown	4-6-4-6	SM SP-SM	roots (topsoil)	
S-2	2-4	2.0/1.1	BKG	Top 0.6': Silty SAND, f to med, 25% fines, med dense, damp, dk brown Bottom 0.5': SAND, poorly graded, f to med, < 5% fines, med dense, damp, reddish brown	10-11-5-4	SM SP	some coal powder	
S-3	4-6	2.0/1.3	BKG	SAND, poorly graded, fine to coarse (mostly f to med), 5% f gravel, < 5% fines, loose, damp, yellow-brown	2-4-5-8	SP		
S-4	6-8	2.0/1.2	BKG	SAND, well graded, fine to coarse, 15% f gravel, < 5% fines, med dense, damp to moist, tan	14-13-15-14	SW		
S-5	8-10	2.0/	BKG	SAND, poorly graded, f to c (finer with depth), < 5% fines, med dense, wet (becoming saturated with depth), tan	10-10-11-9	SP		
S-6	10-12	2.0/2.0	BKG	SAND, poorly graded, f to med (very fine at bottom 0.2'), med dense, saturated, tan with some rust staining	2-5-7-9	SP		
S-7	12-14	2.0/	BKG	SAND, poorly graded, f to med (bottom 0.5' is very fine, denser), med dense, saturated, tan with some rust staining	11-10-14-16	SP		
S-8	14-16	2.0/	BKG	SAND, poorly graded, fine to medium, med dense, saturated, tan	4-4-5-7	SP		
S-9	16-18	2.0/2.0	BKG	Top 1.0': SAND, well graded, fine to coarse, < 5% fines, medium dense, saturated, tan Bottom 1.0': SAND, poorly graded, fine, 10% silt, medium dense, saturated, tan	9-10-12-16	SW SP		
S-10	18-20	2.0/2.0	BKG	SAND, poorly graded, fine, 5 - 12% fines, medium dense, saturated, laminated, tan	5-8-9-10	SP-SM		
S-11	20-22	2.0/1.5	BKG	SAND, poorly graded, fine, < 5% fines, medium dense, saturated, tan with rust staining	10-11-13-15	SP		
S-12	22-24	2.0/2.0	BKG	Top 1.0': SAND, as in S-11 Bottom 1.0': Silty SAND, fine, 25% fines, medium dense, saturated, laminated, tan	11-10-13-13	SP SM		
S-13	24-26	2.0/1.5	BKG	SAND, poorly graded, fine, med dense, saturated, slightly laminated, tan with some rust color	11-13-14-14	SP		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-95-19X (p. 2 of 3)	
CLIENT: AEC			DATE STARTED: 1/20/95			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 1/24/95			PROTECTION: Modified D	
METHOD: HSA and drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 87.0'	
LOGGED BY: J. Healey, H. Colby			CHECKED BY:			WATER TABLE BGS: 10.5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-14	26-28	2.0/1.8	BKG	SAND, as in S-13	10-10-10-11	SP	
S-15	28-30	2.0/1.8	BKG	SAND, as in S-13	12-13-14-15	SP	
S-16	30-32	2.0/1.8	BKG	SAND, as in S-13	10-11-11-12	SP	
S-17	32-34	2.0/0.8	BKG	SAND, as in S-13	12-14-18-21	SP	
S-18	34-36	2.0/1.7	BKG	SAND, similar to S-13, but slightly coarser	8-8-9-11	SP	
S-19	36-38	2.0/0.5	BKG	SAND, as in S-18	3-5-4-5	SP	
S-20	38-40	2.0/1.6	BKG	SAND, as in S-18	9-14-9-13	SP	
S-21	40-42	2.0/1.1	BKG	SAND, as in S-18	9-10-13-12	SP	
S-22	42-44	2.0/0.5	BKG	SAND, as in S-18	9-11-13-17	SP	
S-23	44-46	2.0/	BKG	SAND, as in S-18	5-5-7-9	SP	
S-24	46-48	2.0/2.0		SAND, as in S-18	8-8-12-12	SP	
S-25	48-50	2.0/1.3		SAND, as in S-18	6-8-12-13	SP	
S-26	50-52	2.0/1.5		SAND, as in S-18	25-13-11-12	SP	
S-27	52-54	2.0/2.0		Silty fine sand at top of interval. SAND, poorly graded, fine, medium dense, saturated, slightly laminated, tan with some rust color.	10-17-16-13	SM SP	
S-28	54-56	2.0/2.0		Top 0.8': Fine SAND with silt, trace clay. Next 0.4': Fine SAND, little silt, gray. Bottom 0.8': Fine SAND, yellowish brown.	17-11-17-16	SM SP SP	
S-29	56-58	2.0/1.9		SAND, poorly graded, med dense, saturated, tan, minor laminations	8-6-10-8	SP	
S-30	58-60	2.0/2.0		SAND, as in S-29	7-6-7-11	SP	
S-31	60-62	2.0/0.0		- no recovery -	12-7-4-5	--	
S-32	62-64	2.0/1.8		SAND, as in S-29	2-6-6-5	SP	
S-33	64-66	2.0/		SAND, as in S-29, but slightly more grayish	6-4-3-6	SP	
S-34	66-68	2.0/2.0		SAND, as in S-33	WR-WR-8-8	SP	
S-35	68-70	2.0/1.3		SAND, as in S-33, but with no laminations	8-6-7-13	SP	
S-36	70-72	2.0/2.0		SAND, as in S-35	4-6-5-4	SP	
S-37	72-74	2.0/0.5		SAND, as in S-35 -- poor recovery	WR-7-10-13	SP	
S-38	74-76	2.0/1.1		SAND, as in S-35	5-7-5-4	SP	

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-95-19X (p. 3 of 3)	
CLIENT: AEC			DATE STARTED: 1/20/95			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 1/24/95			PROTECTION: Modified D	
METHOD: HSA and drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 87.0'	
LOGGED BY: J. Healey, H. Colby			CHECKED BY:			WATER TABLE BGS: 10.5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-39	76-78	2.0/1.8		SAND with trace silt, poorly graded, med dense, saturated, grayish tan, minor laminations	8-11-11-4	SP	
S-40	78-80	2.0/2.0		SAND, poorly graded, medium dense, saturated, grayish tan, minor laminations	8-12-17-21	SP	
S-41	80-82	2.0/1.2		SAND, as in S-40	6-7-7-11	SP	
S-42	82-84	2.0/2.0		Top 1.7': SAND, as in S-40. Bottom 0.3': SAND with little silt, poorly graded, med dense, saturated, grayish tan, minor laminations. Weathered rock fragments in tip.	8-13-25-41	SP SP-SM	
S-43	84-85	1.0/1.0		SAND, fine to medium, some f to med gravel, 5% fines, very dense, saturated, gray to brown, TILL	32-48-100/5"	SW	
BOE at 87'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-95-20X (p. 1 of 4)	
CLIENT: AEC			DATE STARTED: 1/16/95			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 1/17/95			PROTECTION: Modified D	
METHOD: HSA and drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 89'	
LOGGED BY: J. Healey			CHECKED BY:			WATER TABLE BGS: 8'	
SAMPLE DEPTH NO.		PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.6		Top 0.3': Sandy SILT, nonplastic, 30% f sand, very stiff, moist, dark brown. Next 0.7': SAND, mod. well graded, f to c (mostly med), loose, damp, light yellow-brown. Bottom 0.6': SAND, poorly graded, fine, loose, damp, tan.	13-33-13-11	SM-ML SW SP	roots a few pieces of coal
S-2	2-4	2.0/1.4		SAND, poorly graded, fine, 10% med to coarse, loose, damp, banded tan and yellow with a 1" band of dk brown silty sand at 0.2'	8-5-4-6	SP	
S-3	4-6	2.0/1.4		SAND, poorly graded, fine, loose, damp. Top 0.4' is banded tan and yellow with one band of dark silt; bottom 1.0' is tan.	3-4-6-8	SP	
S-4	6-8	2.0/1.3		SAND, poorly graded, fine, med dense, damp (bottom 0.1' wet), tan	6-8-8-11	SP	
S-5	8-10	2.0/1.1		SAND, poorly graded, fine, band of silt at 0.3', med dense, top 0.2' wet, bottom 0.9' saturated, tan	3-6-7-7	SP	
S-6	10-12	2.0/1.6		SAND, poorly graded, fine, 10% silt, med dense, saturated, tan with a few bands of rust, laminated	4-6-6-8	SP-SM	
S-7	12-14	2.0/1.8		SAND, poorly graded, fine, band of silt at 1', med dense, saturated, tan with some thick bands of rust, laminated	8-9-16-13	SP-SM	
S-8	14-16	2.0/1.5		SAND, poorly graded, fine, less silt than in S-7, med dense, saturated, tan with thinner bands of rust, laminated	7-7-7-8	SP	
S-9	16-18	2.0/2.0		SAND, poorly graded, fine, med dense, saturated, tan with thin bands of rust, laminated	10-10-10-10	SP	
S-10	18-20	2.0/		SAND, as in S-9	5-7-7-8	SP	
S-11	20-22	2.0/2.0		SAND, as in S-9, but more reddish	6-6-7-5	SP	
S-12	22-24	2.0/2.0		SAND, poorly graded, fine, med dense, saturated, lt brown with thin bands of rust, laminated	5-9-9-9	SP	
S-13	24-26	2.0/2.0		SAND, as in S-12	5-7-9-9	SP	
S-14	26-28	2.0/2.0		SAND, as in S-12, but slightly coarser	10-12-14-14	SP	
S-15	28-30	2.0/		SAND, as in S-14	0-4-6-12	SP	
S-16	30-32	2.0/2.0		SAND, as in S-14	8-11-14-10	SP	
S-17	32-34	2.0/2.0		SAND, as in S-14	13-16-19-23	SP	

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-95-20X (p. 2 of 4)	
CLIENT: AEC			DATE STARTED: 1/16/95			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 1/17/95			PROTECTION: Modified D	
METHOD: HSA and drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 89'	
LOGGED BY: J. Healey			CHECKED BY:			WATER TABLE BGS: 8'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-18	34-36	2.0/0.3		SAND, poorly graded, fine, med dense, saturated, lt brown with thin bands of rust, laminated	not recorded	SP	
S-19	36-38	2.0/1.8		SAND, as in S-18	8-12-16-19	SP	
S-20	38-40	2.0/0.9		SAND, poorly graded, fine, med dense, saturated, tan with some rust laminations	6-9-16-18	SP	
S-21	40-42	2.0/1.5		SAND, as in S-20	9-12-20-23	SP	
S-22	42-44	2.0/2.0		SAND, as in S-20	8-6-10-18	SP	
S-23	44-46	2.0/1.3		Top 0.2': Silty CLAY, slightly plastic, very stiff, saturated, lt brn Next 0.4': SILT, nonplastic, 25 - 30% f sand, very stiff, saturated, tan and rust, highly laminated Bottom 0.7': SAND, poorly graded, fine, grain size decreases with depth, dense, saturated, tan with rust bands, laminated	8-15-18-23	CL ML SP	
S-24	46-48	2.0/2.0		Top 1.5': SAND, as in bottom 0.7' of S-23. Bottom 0.5': Interbedded fine SAND, SILT, and CLAY, sand is poorly graded, 50% fines, saturated, tan and gray-brown, thin laminar beds	6-8-8-14	SP SM, ML, and CL	
S-25	48-50	2.0/2.0		Top 0.8': Silty SAND, poorly graded, fine, 15 - 20% fines, saturated, tan with rust laminations. Bottom 1.2': Interbedded SILT and CLAY, slightly plastic, 15% f sand, very stiff, saturated, tan and gray-brown and rust, highly laminated	not recorded	SM ML and CL	
S-26	50-52	2.0/2.0		Top 1.0': SAND, poorly graded, fine, 10 - 20% fines, dense, saturated, tan with rust laminations. Bottom 1.0': SAND, poorly graded, fine, dense, saturated, tan with rust laminations	12-16-18-20	SM SP	
S-27	52-54	2.0/2.0		SAND, poorly graded, fine, 5 - 10% fines (a few thin bands of silt and clay), medium dense, saturated, tan with rust staining	8-11-13-22	SP	
S-28	54-56	2.0/2.0		SAND, poorly graded, fine, dense, saturated, tan with rust laminations	10-18-14-14	SP	
S-29	56-58	2.0/2.0		SAND, poorly graded, fine, 5% fines (a few thin bands of silt), dense, saturated, tan with rust laminations	10-12-19-21	SP	
S-30	58-60	2.0/1.7		SAND, poorly graded, fine, dense, saturated, tan with rust laminations	12-13-14-23	SP	

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: G6M-95-20X (p. 4 of 4)	
CLIENT: AEC			DATE STARTED: 1/16/95			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 1/17/95			PROTECTION: Modified D	
METHOD: HSA and drive & wash			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 89'	
LOGGED BY: J. Healey			CHECKED BY:			WATER TABLE BGS: 8'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-44	86-88	2.0/2.0		<u>Top 1.2'</u> : SAND, poorly graded, fine, dense, saturated, tan <u>Next 0.3'</u> : Gravelly SAND, well graded, fine to coarse, 40% fine gravel, dense, saturated, gray <u>Bottom 0.5'</u> : SAND, poorly graded, fine to medium, 15% fine gravel, 5 - 10% fines, dense, saturated, gray, till	8-18-15-38	SP SW SP-SM	
S-45	88-89	1.0/1.0		<u>Top 0.5'</u> : SAND, poorly graded, fine to coarse, 10% fine gravel, very dense, saturated, gray <u>Bottom 0.5'</u> : SAND, poorly graded, fine, 15% fine gravel, 5% fines, very dense, saturated, gray	60-88-100/0"	SP SP	
BOE at 89'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 30B-92-01X	
CLIENT: AEC			DATE STARTED: 6/11/92			GROUP: 6 (Moore Airfield-DSA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/11/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 268.6'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
				0-0.6 Drilled through cement..		Ground surface is taken to be below asphalt	
S-1	0-2	2.0/1.6	BKG	SAND, poorly graded, medium-dense, dry. SP-SM (0-0.2) gravelly; ~40% fill, 7.5YR7/6 Munsell reddish-yellow. (0.2-1.6) 10YR8/3 very pale brown, no structure, glacial outwash.	2/7/6/7	3" spoon. Analytical sample collected.	
S-2	2-4	2.0/-	BKG	Same as above, medium to coarse grained (~10% feldspar and mica, ~85% quartz) with ~5% gravel. SP-SM	5/6/8/7	2" spoon. Grain-size analysis performed.	
S-3	4-6	2.0/0.9	BKG	Same as above except loose, 10YR8/2 Munsell white. SP-SM	3/6/4/7	2" spoon. Analytical sample collected.	
S-4	6-8	2.0/1.5	BKG	Same as above except color change to darker brown from 6.5 - 6.55'. SP-SM	4/4/4/4	2" spoon.	
S-5	8-10	2.0/2.0	BKG	Same as above but coarser, sand composition= quartz ~80%, mica ~10%, and feldspar ~10%. SP-SM	3/4/4/5	2" spoon. Analytical sample and duplicate collected.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 30B-92-02X	
CLIENT: AEC			DATE STARTED: 6/10/92			GROUP: 6 (Moore Air Field-DSA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/10/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 268.6'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0.4-2	2.0/1.6	BKG	Augered through 0.4' of asphalt SAND, medium with trace gravel (<10%), poorly graded, medium-dense, dry, 10YR8/2 Munsell white, glacial outwash, quartz ~80% and feldspars. SP	2/7/7/8	2" spoon. Analytical samples collected.	
S-2	2-4	2.0/1.1	BKG	Same as above except gravel <5%, loose, quartz ~85%, brown band from 2.7-2.73'. SP	7/5/5/7	2" spoon.	
S-3	4-6	2.0/1.2	BKG	Same as above except no gravel, loose. SP	2/6/7/6	2" spoon. Analytical samples collected.	
S-4	6-8	2.0/1.4	BKG	Same as above. SP	2/4/5/6	2" spoon.	
S-5	8-10	2.0/1.3	BKG	Same as above except coarser, little gravel (~10%) SP	2/3/4/5	2" spoon. Analytical samples collected.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 30B-92-03X	
CLIENT: AEC			DATE STARTED: 6/11/92			GROUP: 6 (Moore Air Field-DSA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/11/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 268.8'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.8	BKG	SAND, medium to coarse with little (~10%) gravel, sand - 75% quartz, ~15% mica and feldspar; poorly graded, medium dense, 10YR6/2 Munsell light brownish-gray, no structure. SP	4/11/11/14	3" spoon. Analytical sample collected. Depth 0 is ~0.4' below top of asphalt.	
S-2	2-4	2.0/-	-	Same as above. SP	4/5/6/8	3" spoon.	
S-3	4-6	2.0/-	-	Same as above except <5% gravel, sand - ~85% quartz, ~10% mica and feldspar, and 10YR8/2 Munsell white. SP	11/8/6/6	2" spoon. Collected analytical sample.	
S-4	6-8	2.0/1.7	BKG	Same as above except no gravel, sand - ~90% quartz, ~5% mica, ~5% feldspar, 10YR7/2 Munsell light gray, loose, and moist. SP	4/2/6/7	2" spoon.	
S-5	8-10	2.0/-	BKG	Same as above except coarser, sand - ~85% quartz, ~10% mica, ~5% feldspar; medium dense. SP	5/8/8/9	3" spoon. Collected analytical sample.	
BOE at 10'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: 30B-92-04X	
CLIENT: AEC		DATE STARTED: 6/10/92			GROUP: 6 (Moore Air Field-DSA)	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/10/92			PROTECTION: Modified D	
METHOD: 4.25" HSA		BORING DIAMETER: 8"			PID METER: Model 5808 OVM	
GROUND ELEV.: 268.7'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS		CHECKED BY: BJR			WATER TABLE BGS: ~9' (perched)	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.8	BKG	(0-0.5') Silty SAND, poorly graded, medium dense, damp, 10YR3/2 Munsell very dark grayish brown, roots/grass, fill? SM (0.5-1.8') Gravelly SAND, well graded, medium dense, dry, 10YR8/1 Munsell white, no structure, glacial outwash. SW	2/11/9/11	Analytical sample collected.
S-2	2-4	2.0/1.5	BKG	Same as above except some (~20%) gravel, sand - ~20% mica and feldspar, poorly graded. SP	10/10/9/10	
S-3	4-6	2.0/-	BKG	Same as above except loose. SP	3/5/4/6	Analytical sample collected.
S-4	6-8	2.0/1.4	BKG	Same as above except well graded. SW	2/3/2/4	
S-5	8-10	2.0/1.6	BKG	Same as above except oxidized horizon at 8.8-8.9' and top of wet zone at 8.9'. SW	2/3/4/3	Analytical sample collected.
				BOE at 10'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 30B-92-05X	
CLIENT: AEC		DATE STARTED: 6/10/92		GROUP: 6 (Moore Air Field-DSA)			
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/10/92		PROTECTION: Modified D			
METHOD: 4.25" HSA		BORING DIAMETER: 8"		PID METER: Model 580B OVM			
GROUND ELEV.: 268.5'		REFERENCE PT. ELEV.: NA		TOTAL DEPTH: 10'			
LOGGED BY: LNS		CHECKED BY: BJR		WATER TABLE BGS: Not encountered			
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.7	BKG	(0-0.6) Silty SAND with ~10% pebbles, poorly graded, medium dense, damp, 10YR3/1 Munsell very dark gray, roots, fill? SM (0.6-1.7) SAND, medium to coarse, poorly graded, medium dense, damp, 10YR6/6 Munsell brownish yellow, glacial outwash. SP	2/8/8/11	3" spoon. Analytical sample collected.	
S-2	2-4	2.0/1.3	BKG	Coarse SAND with ~5% gravel, poorly graded, loose, damp, 10YR6/8 Munsell brownish yellow grading down to 10YR8/3 Munsell very pale brown, glacial outwash. SP	4/5/5/8	2" spoon.	
S-3	4-6	2.0/1.2	BKG	(4.0-4.4) Same as above. (4.4-5.2) Same as above except 10YR8/2 Munsell white SP	4/6/6/7	2" spoon. Grain-size analysis performed.	
S-4	6-8	2.0/1.6	BKG	Same as above except medium grained, ~90 quartz, ~10% mica and feldspar, loose, 10YR8/1 Munsell white. SP	3/4/5/4	2" spoon. Analytical sample collected.	
S-5	8-10	2.0/-	-	Same as above except fine to medium grained and very loose. SP	2/2/2/3	2" spoon. Analytical sample collected.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 30B-92-06X	
CLIENT: AEC			DATE STARTED: 6/10/92			GROUP: 6 (Moore Air Field-DSA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/10/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 266.5'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/2.0	BKG	Silty SAND, fine, poorly graded, ~15% silt and ~15% gravel, medium dense, dry, 10YR3/3 Munsell dark brown, roots near top, fill? (1.5-2.0) Same as above except coarser, ~10% gravel, 10YR8/2 Munsell white, fill?	4/11/11/19	3" spoon. Analytical sample collected. Split with CDM.	
S-2	2-4	2.0/1.6	BKG	(2.0-3.0) Same as above except dense. Abrupt facies change at 3.0'. (3.0-3.6) SAND, medium to coarse, ~10% micas and feldspars, poorly graded, dense, dry to moist, 10YR8/2 Munsell white, glacial outwash.	14/15/17/12	3" spoon. Analytical sample collected. Split with CDM.	
S-3	4-6	2.0/1.6	BKG	Same as above except fine to medium grading down to medium, medium dense.	3/7/7/4	2" spoon.	
S-4	6-8	2.0/1.3	BKG	Same as above except 6.1-6.4 is dry, 10YR6/4 Munsell light yellowish brown with two 0.05' thick bands of darker brown sand.	4/8/7/9	2" spoon.	
S-5	8-10	2.0/1.0	BKG	Same sand as above except medium to coarse, ~20% micas and feldspars, loose.	2/3/4/6	2" spoon. Analytical sample collected.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 30B-92-07X	
CLIENT: AEC			DATE STARTED: 6/10/92			GROUP: 6 (Moore Air Field-DSA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/10/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 5 OVM	
GROUND ELEV.: 268.0'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: 7.5'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.0	BKG	SAND, poorly graded with gravel, medium dense, dry. (0-0.1) 10YR7/1 Munsell light gray, glacial outwash, ~10% gravel. (0.1-1.0) Same as above except gravelly, no roots, 7.5YR3/2 Munsell dark brown. SP	7/7/7/5	2" spoon. Analytical sample collected.	
S-2	2-4	2.0/1.1	BKG	(2.0-2.2) Same as above. (2.2-2.6) Same as above except 7.5YR5/4 Munsell brown, ~30% coarse sand (3 mm). (2.6-2.9) Shattered cement piece (from surface) (2.9-3.1) Same as 2.2-2.6. SP	5/16/12/7	2" spoon. Grain-size analysis performed.	
S-3	4-6	2.0/1.4	BKG	SAND, poorly graded with ~90% medium silica quartz grains and ~10% medium mica and feldspar fragments, loose, dry, 10YR8/4 Munsell very pale brown, glacial outwash. SP	2/2/3/5	2" spoon.	
S-4	6-8	2.0/1.6	BKG	Same as above, WET at 7.5'. SP	3/3/5/8	2" spoon. Analytical sample collected.	
S-5	8-10	2.0/1.8	BKG	Same as above except grain size coarsens downward from medium to coarse. SP	2/2/8/10	3" spoon. Collected analytical sample and split with CDM.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-07		BORING NO.: 30B-92-08X	
CLIENT: AEC			DATE STARTED: 6/10/92			GROUP: 6 (Moore Air Field-DSA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/10/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 5808 OVM	
GROUND ELEV.: 267.4'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.9	BKG	SAND, fine to medium, poorly graded, medium dense, dry, 10YR3/3 Munsell dark brown, some grass roots at surface, some blackened areas at 1.0 and 1.6', fill. SP	3/6/5/6	Analytical sample collected.	
S-2	2-4	2.0/1.5	BKG	(2.0-2.2) Same as above (fill). (2.2-3.5) SAND, medium to coarse, ~15% gravel, sand - ~85% quartz, ~10% mica and feldspars, poorly graded, medium dense, poorly graded, medium dense, dry, 10YR7/3 Munsell very pale brown, glacial outwash. SP	3/5/6/6		
S-3	4-6	2.0/1.4	BKG	Same as above except sand - 90% quartz, ~5% mica, ~5% feldspar, loose, 10YR8/2 Munsell white. SP	1/2/4/4	Analytical sample collected and grain-size analysis performed.	
S-4	6-8	2.0/1.0	BKG	Same as above except med ³ ium dense. SP	2/5/7/6		
S-5	8-10	2.0/1.5	BKG	Same as above except very loose. SP	2/3/0/8	Analytical sample collected.	
BOE at 10'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: 31B-92-01X	
CLIENT: AEC			DATE STARTED: 6/11/92		GROUP: 6 (Moore Airfield-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/11/92		PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"		PID METER: Model 580B OVM	
GROUND ELEV.: 267.5'			REFERENCE PT. ELEV.: NA		TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR		WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/1.6	BKG	SAND, poorly graded, medium with ~10% gravel, medium dense, dry, 10YR5/6 Munsell yellowish brown grading to a slightly darker brown, no structure, variable minerals (quartz, mica, feldspar). SP	6/11/11/11	Analytical sample collected. 2" spoon. Drilled through 0.4' tarmac.
S-2	2-4	2.0/1.5	BKG	(2.0-2.7') Same as above. (2.8-3.5') SAND, Same as above except 10YR5/8 Munsell yellowish brown, very homogenous, from 2.7-2.8' there is a band of black stained material, glacial outwash. SP	6/7/8/6	Analytical sample collected. 2" spoon.
S-3	4-6	2.0/1.6	BKG	SAND, well graded, ~10% gravel, loose, dry, 10YR5/8 Munsell yellowish brown, glacial outwash. SW	9/3/5/4	2" spoon.
S-4	6-8	2.0/1.8	BKG	SAND, poorly graded, medium to coarse, ~80% quartz, ~10% feldspar, ~10% mica, loose, dry, 10YR7/2 Munsell light gray. SP	4/3/4/5	2" spoon.
S-5	8-10	2.0/-	BKG	Same as above. SP	3/2/5/12	Analytical sample collected. 2" spoon.
				BOE at 10'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 31B-92-02X	
CLIENT: AEC			DATE STARTED: 6/11/92			GROUP: 6 (Moore Airfield-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/11/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 267.8'			REFERENCE PT. ELEV.:			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	BKG	(0-0.4') SAND, poorly graded, fine to medium with little (~15%) gravel, medium dense, 10YR5/3 Munsell brown. SP (0.4-0.7') SAND, poorly graded, medium with ~80% quartz and ~20% mica and feldspar, 10YR7/4 Munsell very pale brown. SP (0.7-1.0') Same except 10YR4/2 Munsell dark grayish brown. SP (1.0-1.5') Same except 10YR6/4 Munsell light yellowish brown, some faint color banding apparent SP	6/11/11/14	Analytical sample collected.	
S-2	2-4	2.0/1.5	BKG	SAND, poorly graded, with 5-10% fines, <5% gravel, medium dense, dry, 10YR7/4 Munsell very pale brown. At 3.2' color changes abruptly to 10YR2/2 Munsell very dark brown, becomes finer, and has 2 bands each of 0.01' thick of lighter brown and black at 3.4'. SP-SM	12/9/6/9	Grain size analysis performed-->SP-SM.	
S-3	4-6	2.0/1.6	BKG	SAND, poorly graded with ~85% quartz and ~15% mica and feldspar, medium dense, dry, 10YR7/4 Munsell very pale brown. Concrete fragment present at 4.1' (from above). SP	10/9/8/7	Analytical sample collected.	
S-4	6-8	2.0/1.5	BKG	(6.0-6.2') SAND, poorly graded, fine, loose, 10YR3/1 Munsell very dark gray, glacial outwash. SP (6.2-7.5') Same as S-3. SP	4/4/4/5		
S-5	8-10	2.0/1.4	BKG	Same as above except color change 10YR7/2 Munsell light gray grading to 10YR8/2 Munsell white at bottom. SP	3/5/5/6	Analytical sample collected.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 31B-92-03X	
CLIENT: AEC			DATE STARTED: 6/11/92			GROUP: 6 (Moore Air Field-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 267.8'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	BKG	SAND, moderately poorly graded, fine to medium with little (~10%) gravel, sand - 80% quartz, and ~10% mica and feldspar, medium dense, dry, 10YR5/4 Munsell yellowish brown, no structure. SP	9/10/15/16	Analytical sample collected. 2" spoon. Drilled through asphalt, depths are from bottom of asphalt.	
S-2	2-4	2.0/1.0	BKG	Same as above except 10YR6/6 Munsell brownish yellow, dense. SP	25/12/20/14	2" spoon.	
S-3	4-6	2.0/1.5	BKG	Same as above with gradual color change 10YR7/3 Munsell very pale brown, medium dense. SP	7/11/8/6	Analytical sample collected. 2" spoon.	
S-4	6-8	2.0/1.4	BKG	(6.0-6.3') SAND, fine to medium, poorly graded, medium dense, dry, 10YR4/3 Munsell dark brown. SP (6.3-7.4') Same as S-3.	4/6/7/8	2" spoon.	
S-5	8-10	2.0/	BKG	Same as above. SP	3/6/14/12	Analytical sample and MS/MSD collected. 3" spoon.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 31B-92-04X	
CLIENT: AEC			DATE STARTED: 6/12/92			GROUP: 6 (Moore Air Field-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/12/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 267.5'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.3	2.5	SAND, moderately well graded, fine to medium with little (~10%) fine gravel (subrounded), sand - ~80% quartz and ~10% mica and feldspars, medium dense, dry, 10YR6/6 Munsell brownish yellow, slightly darker brown at top of SW spoon, no structure.	3/14/15/14	Analytical sample collected. 2" spoon. Drilled through 0.3' of asphalt.	
S-2	2-4	2.0/1.6	BKG	(2.0-2.7') Same as above. SW (2.7-3.0') Same as above only increasing percentage of fine sand, 10YR5/1 Munsell gray. SP (3.0-3.6') Same sand only fine to medium, no gravel, 10YR4/6 Munsell dark yellowish brown. SP	15/10/10/9	2" spoon.	
S-3	4-6	2.0/1.8	BKG	Same as above only increasing percentage of medium to coarse sand, 10YR6/6 Munsell brownish yellow. SP	4/7/7/9	Analytical sample collected. Split with S. Vest of M&E. 3" spoon.	
S-4	6-8	2.0/1.5	BKG	Same as above except 10YR7/3 Munsell very pale brown, ~85% quartz and ~15% mica and feldspars, loose. SP	2/4/5/7	2" spoon.	
S-5	8-10	2.0/1.8	BKG	(8.0-8.5') Same as above except medium dense. (8.5-9.8') Same as above except 10YR8/2 Munsell white, ~90% quartz and ~10% mica and feldspar. SP	4/7/10/11	Analytical sample collected, and split with CDM. 3" spoon.	
				BOE at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 31B-92-05X	
CLIENT: AEC			DATE STARTED: 6/12/92			GROUP: 6 (Moore Air Field-FTA)	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/15/92			PROTECTION: Modified D	
METHOD: 4.25" HSA			BORING DIAMETER: 8"			PID METER: Model 580B OVM	
GROUND ELEV.: 267.4'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 62'	
LOGGED BY: LNS			CHECKED BY: BJR			WATER TABLE BGS: 15-17'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.5	BKG	(0-0.4') SAND, poorly graded, fine to medium with ~75% quartz and ~25% other fines, medium dense, dry, 10YR6/2 Munsell light brownish gray, no structure. SP (0.4-1.5') Same as above except 10YR7/2 Munsell light gray, ~80% quartz and ~20% mica and feldspar and other fines, glacial outwash. SP	2/10/15/20	Analytical sample collected, and split with CDM. 3" spoon.	
S-2	5-7	2.0/1.5	BKG	(5.0-5.3') SAND, poorly graded, fine, loose, dry, 7.5YR3/2 Munsell dark brown. SP (5.3-6.5') SAND, poorly graded, medium to coarse, loose, dry, 10YR6/4 Munsell light yellowish brown, ~80% quartz, ~10% mica and feldspars, and ~10% fines. SP-SM	5/3/5/5	2" spoon.	
S-3	10-12	2.0/1.4	BKG	(10.0-10.7') Same as above. (10.7-11.4') Same as above except 10YR7/2 Munsell light gray, ~85% quartz and ~15% mica and feldspars, <5% fines, <5% gravel SP	2/3/4/11	Grain size analysis performed-->SP. 2" spoon.	
S-4	15-17	2.0/2.0	BKG	(15.0-15.3') Same as above. (15.3-17.0') SAND, poorly graded, coarse with little (~15%) gravel, ~75% quartz and ~10% micas and feldspars, medium dense, WET, 10YR8/2 Munsell white, no structure. SP	7/7/8/8	Analytical sample and duplicate collected, and split with M&E.	
S-5	20-22	2.0/0.9	BKG	Same as above except loose. SP	3/4/6/7	2" spoon.	
S-6	25-27	2.0/1.0	BKG	Same as above. SP	6/5/4/7	2" spoon.	
S-7	30-32	2.0/1.5		Same as above. SP	4/4/6/6	Analytical sample collected. 2" spoon.	
S-8	35-37	2.0/1.2	BKG	SAND, poorly graded, coarse with little (~10%) gravel (.75" max), subangular, medium dense, moist, 10YR6/3 Munsell pale brown, no structure. SP	8/8/8/8	2" spoon.	

SOIL BORING LOG - FORT DEVENS, MA.
BORING NO.: 31B-92-05X

(continued)

SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS		BLOWS/6"	COMMENTS
S-9	40-42	2.0/1.0	BKG	Same as above.	SP	5/7/9/10	2" spoon.
S-10	45-47	2.0/1.3	BKG	Same as above with gravel to 3".	SP	10/12/17/16	Analytical sample collected. 3" spoon.
S-11	50-52	2.0/1.3	BKG	Same as above.	SP	10/9/10/16	2" spoon.
S-12	55-57	2.0/1.2	BKG	SAND, poorly graded, fine to medium with trace (~5%) fine gravel, subangular, medium dense, moist, 10YR6/3 Munsell pale brown.	SP	6/11/14/17	Grain size analysis performed-->SP. 2" spoon.
S-13	60-62	2.0/1.7	BKG	Same as above except very dense.	SP	10/24/30/36	Analytical sample and MS/MSD collected.
				BOE at 62'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 50B-92-01X	
CLIENT: AEC			DATE STARTED: 6/26/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/26/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10"			PID METER: Microtip HL-200	
GROUND ELEV.: 262.8'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 32'	
LOGGED BY: GF			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
	0-1			BITUMINOUS CONCRETE			
S-1	1-3	2.0/1.2	BKGD	SAND, well graded, coarse to fine, 5-10% fines, 10-15% subrounded gravel, very dense, slightly damp, 10YR5/6 Munsell yellowish brown, fill SW-SM	17/36/27/19	Analytical sample collected. Grain size anal. performed ->SW-SM PID=BKGD, LEL/02=0/21	
S-2	5-7	2.0/1.6	BKGD	SAND, well graded, coarse to fine, 0-10% fines, 10-15% subrounded gravel, loose, slightly damp, 10YR5/6 Munsell yellowish brown SW-SM	3/3/2/3	PID=BKGD, LEL/02=0/21	
S-3	10-12	2.0/1.2	BKGD	SAND, well graded, same as S-2 SW-SM	3/3/4/3	PID=BKGD, LEL/02=0/21	
S-4	15-17	2.0/0.6	BKGD	SAND, well graded, same as S-2, except for 10YR5/3 Munsell Brown SW-SM	4/4/3/3	PID=BKGD, LEL/02=0/21	
S-5	20-22	2.0/0.3	BKGD	SAND, well graded, same as S-2, S-4 SW-SM	4/5/3/4	PID=BKGD, LEL/02=0/21	
S-6	25-27	2.0/1.8	BKGD	SILTY SAND, poorly graded, coarse to fine 10-20% fines, 30-40% subrounded gravel, medium dense, damp, 10yr6/3 Munsell pale brown SM	18/10/11/12	PID=BKGD, LEL/02=0/21 Analytical sample collected	
S-7	30-32	2.0/1.8	BKGD	SILTY SAND, poorly graded, same as S-6 SM	9/9/10/10	Grain size analysis performed -> SM Analytical sample taken. PID=BKGD, LEL/02=0/21	
				Bottom of Exploration at 32' (no groundwater encountered)			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: B50-92-02X	
CLIENT: AEC		DATE STARTED: 9/29/92			GROUP: 6	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 9/29/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10" borehole			PID METER:	
GROUND ELEV.: 263.7'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 11'	
LOGGED BY: JKR/JC		CHECKED BY: -			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
				(0.0-0.4') ASPHALT (0.4-1.0') ASPHALT SUBBASE		
S-1	1-3	2.0/1.4	BKGD	SAND, well graded, fine to coarse, 0-5% fines, 20-40% gravel, dense, dry, 7.5YR5/4 to 7.5YR6/4 Munsell brown to light brown SW	8/20/18/17	All samples taken with 2" split-spoon Analytical sample collected.
S-2	3-5	2.0/1.2	BKGD	SAND, poorly graded, fine to medium, 0-5% fines, 10-20% gravel, dense, damp 7.5YR5/4 Munsell brown SP	22/20/19/23	
S-3	5-7	2.0/1.3	BKGD	SAND, poorly graded, same as S-2 SP	20/21/20/15	Analytical sample collected.
S-4	7-9	2.0/1.2	BKGD	SAND, poorly graded, medium to coarse, 0-5% gravel, medium dense, damp, 7.5Y~5/4 to 7.5YR6/4 Munsell brown to light brown SP	3/9/12/12	Grain size analysis performed -> SP
S-5	9-11	2.0/1.6	BKGD	SAND, poorly graded, mostly medium, medium dense, damp, 7.5YR5/4 Munsell brown SP	5/7/7/7	Analytical sample collected.
				Bottom of exploration at 11' (no water encountered)		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 50B-92-03X	
CLIENT: AEC			DATE STARTED: 6/25/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/25/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" borehole			PID METER: Microtip	
GROUND ELEV.: 263.7'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: RRR			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.6	BKGD	(0-0.3') SILTY SAND(topsoil), poorly graded, 0-10% fines, loose, moist, 7.5YR3/4 Munsell dark brown (0.3-1.6') SILTY SAND, poorly graded, medium to fine, subrounded, 15% fines, medium dense, damp, 10YR6/4 Munsell light yellowish brown SM	4/6/6/8	Analytical samples taken for TPHC, VOA, and Lead Headspace PID = BKGD	
S-2	2-4	2.0/1.6	BKGD	SAND, poorly graded, medium to fine, 0-5% fines, medium dense, 10YR6/4 Munsell light yellowish brown SP	7/6/6/7	Headspace PID = BKGD	
S-3	4-6	2.0/1.5	BKGD	(4.0-5.2') SAND, well grad., same as S-2 SW (5.2-5.5') SAND, well graded, coarse to fine, 0-5% fines, medium dense, dry, 10YR7/4 Munsell very pale light brown SW	4/7/6/7	analytical samples taken for TPHC, VOA, and Lead Headspace PID = BKGD	
S-4	6-8	2.0/1.4	BKGD	SANDY SILT, well graded, 30-40% coarse to fine sand, dry, very stiff, 10YR7/4 Munsell very pale light brown Munsell ML	2/8/12/13	Headspace PID = BKGD Grain size analysis performed -> ML	
S-5	8-10	2.0/1.4	BKGD	SANDY SILT, well graded sand, same as S-4 ML	3/4/9/8	Headspace PID = BKGD Analytical samples taken	
				Bottom of Exploration at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 50B-92-04X	
CLIENT: AEC			DATE STARTED: 6/25/92			GROUP: 6	
CONTRACTOR: D.L. Maher			DATE COMPLETED: 6/25/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" borehole			PID METER: Microtip	
GROUND ELEV.: 263.1'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: RRR			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.6	BKGD	(0.0-0.3') SILTY SAND (Topsoil) poorly graded, fine to medium, 20% silt, loose, dry 10YR2/2 Munsell very dark brown SM (0.3-1.6') SAND poorly graded, fine to medium, medium dense, dry, 10YR7/4 Munsell very pale brown SP	4/5/7/12	Analyticals taken for TPHC, VOAs, and Pb Headspace PID = BKGD	
S-2	2-4	2.0/1.4	BKGD	(2.0-2.6') SAND, poorly graded, same as 0.3-1.6' SP (2.6-3.4') SAND, well graded, coarse to fine, 5-15% subrounded gravel, medium dense, dry, 10YR7/4 Munsell very pale brown SW	9/12/8/14	Headspace PID = BKGD	
S-3	4-6	2.0/1.5	BKGD	SAND, well graded, same as 2.6-3.4; occasional thin (0.02') laminate of sandy silt, 10YR3/3 Munsell dark brown SW	6/13/9/9	Analyticals taken for TPHC, VOAs, and Pb Headspace PID = BKGD	
S-4	6-8	2.0/1.5	BKGD	SAND, well graded, coarse to fine, 5-10% subrounded gravel, medium dense, dry, 10YR7/4 Munsell very pale brown SW	9/15/6/9	Headspace PID = BKGD	
S-5	8-10	2.0/1.6	BKGD	SAND, well graded, same as S-4 SW	8/8/12/13	Headspace PID = BKGD. Analytical sample taken	
				Bottom of Exploration at 10'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 50B-92-05X	
CLIENT: AEC			DATE STARTED: 6/26/92			GROUP: 6	
CONTRACTOR: D.L. Maher			DATE COMPLETED: 6/26/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" borehole			PID METER: Microtip	
GROUND ELEV.: 262.5'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: RRR			CHECKED BY:			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/2.0	6.5	(0.0-0.6') SILTY SAND, well grd., coarse to fine, 10-15% fines, 10YR3/3 Munsell dark brown (Topsoil) SM (0.6-2.0') SILTY SAND, poorly graded, medium to fine 10-15% fines, medium dense, damp, 10YR6/3 Munsell pale brown SM	3/7/8/9	Headspace PID = BKGD Analytical sample taken	
S-2	2-4	2.0/1.3	BKGD	SAND, poorly graded, medium to fine, 5-10% fines, medium dense, damp, 10YR6/3 Munsell pale brown SP	4/5/7/9	Headspace PID = BKGD	
S-3	4-6	2.0/1.6	BKGD	(4.0-4.8') SAND, poorly graded, same as S-2 except loose SP (4.8-5.6') SAND, poorly graded, medium to fine, 5-10% fines, trace gravel, loose, damp, 10YR7/3 Munsell very pale brown SP	4/5/5/7	Headspace PID = BKGD Analytical sample taken	
S-4	6-8	2.0/1.6	BKGD	SAND, poorly graded, same as 4.8-5.6', except medium dense SP	4/7/6/6	Headspace PID = BKGD	
S-5	8-10	2.0/2.0	BKGD	SAND, poorly graded, same as S-4, except loose SP	4/3/6/5	Headspace PID = BKGD Analytical sample taken. Grain size analysis performed -> SP	
				Bottom of exploration at 10' (no water encountered)			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 50B-92-06X	
CLIENT: AEC			DATE STARTED: 6/26/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/26/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" borehole			PID METER: Microtip	
GROUND ELEV.: 261.1'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 10'	
LOGGED BY: RRR			CHECKED BY: DSP			WATER TABLE BGS: Not encountered	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.6	BKGD	(0.0-0.3') SILTY SAND, poorly graded, coarse to fine, 10-15% fines, loose, dry, 10YR3/3 Munsell dark brown SM (0.3-1.6') SAND, poorly graded, medium to fine, 5-10% fines, loose, dry, 10YR6/3 Munsell pale brown SP	4/5/5/5	Headspace PID = BKGD Analytical sample taken	
S-2	2-4	2.0/1.4	BKGD	SAND, well graded, coarse to fine, 5-10% fines, medium dense, dry, 10YR6/3 Munsell pale brown SW	5/7/7/9	Headspace PID = BKGD	
S-3	4-6	2.0/1.6	BKGD	SAND, well graded, same S-2 SW	4/6/6/7	Headspace PID = BKGD Analytical sample taken	
S-4	6-8	2.0/1.5	BKGD	SAND, well graded, same S-2 SW	4/7/4/5	Headspace PID = BKGD	
S-5	8-10	2.0/2.0	BKGD	SAND, well graded, coarse to fine, 5-10% fines, 10-15% gravel, medium dense, dry, 10YR6/3 Munsell pale brown SW	3/9/12/9	Headspace PID = BKGD Analytical sample duplicate taken.	
				Bottom of exploration at 10' (no water encountered)			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 50B-92-07X	
CLIENT: AEC			DATE STARTED: 6/24/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/24/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" borehole			PID METER: 10.6eV TE	
GROUND ELEV.: 223.4'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12'	
LOGGED BY: GF			CHECKED BY: DSP			WATER TABLE BGS: Approximately 10'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.3	BKGD	SAND, well graded, coarse to fine, 5-10% fines, trace subrounded gravel, very loose, dry 10YR6/3 Munsell pale brown SW	1/2/1/3	Headspace PID = BKGD LEL/02 = 0/21 Analytical sample taken	
S-2	5-7	2.0/2.0	BKGD	(2.0-2.4') SAND, well graded, same as S-1, except loose SW (2.4-2.7') SILTY SAND, poorly graded, medium to fine, 10-20% fines, 5-10% gravel, loose, moist, 10YR5/2 Munsell grayish brown SM (2.7-4.0') SAND, well graded, same as 2.0-2.4' SW	2/3/4/5	Headspace PID = BKGD LEL/02 = 0/21 Analytical sample taken. Grain size analysis performed -> SM	
S-3	10-12	2.0/2.0	BKGD	silty SAND, poorly graded, medium to fine, 10-20% fines, 5-20% gravel, loose, saturated, 10YR5/4 Munsell yellowish brown SM	2/3/2/3	Headspace PID = BKGD LEL/02 = 0/21 Analytical sample taken	
				Bottom of Exploration at 12'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6970-04		BORING NO.: 50B-92-08X	
CLIENT: AEC			DATE STARTED: 6/23/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/23/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" borehole			PID METER: 10.6 eV TE	
GROUND ELEV.: 223.1'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 12.0'	
LOGGED BY: GF			CHECKED BY: DSP			WATER TABLE BGS: Approximately 10'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.6	BKGD	SAND, well graded, fine to coarse, 5-15% fines, 0-5% subrounded to subangular gravel, loose, dry, 0.0-1.3' 10YR6/6 Munsell brownish yellow 1.3-1.6' 10YR4/2 Dark grayish brown SW	3/4/3/3	LEL/02 = 0/21 Analytical sample taken	
S-2	5-7	2.0/1.8	BKGD	SAND, well graded, fine to coarse, 5-15% fines, 0-5% subrounded, to subangular gravel, medium dense, dry, 10YR6/3 Munsell pale brown SW	9/6/7/11	LEL/02 = 0/21 Analytical sample taken	
S-3	10-12	2.0/1.8	50	SAND, well graded, same as S-2, except Saturated , 10YR6/6 Munsell brownish-yellow SW	5/5/7/7	LEL/02 = 0/21 Analytical sample taken	
				Bottom of Exploration at 12.0' (estimated depth to water - 10.5')			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04	BORING NO.: 50B-92-09X	
CLIENT: AEC		DATE STARTED: 6/23/92			GROUP: 6	
CONTRACTOR: D. L. Maher		DATE COMPLETED: 6/23/92			PROTECTION: Modified D	
METHOD: 6.65" HSA		BORING DIAMETER: 10" borehole			PID METER: 10.6 eV TE	
GROUND ELEV.: 226.9'		REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 17.0'	
LOGGED BY: GF		CHECKED BY: DSP			WATER TABLE BGS: approx. 14'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS
S-1	0-2	2.0/0.9	BKGD	SAND, well graded, coarse to fine, 5-15% fines, 0-5% subrounded gravel, loose, dry, (0.0-0.3') 10YR5/3 Munsell brown, SW (0.3-0.9') 10YR5/6 Munsell yellowish brown	4/4/5/7	LEL/02 = 0/21 Analytical sample taken
S-2	5-7	2.0/1.5	BKGD	SAND, poorly graded, medium to fine, 5-15% fines, 0-5% subrounded gravel, very loose, dry (0.0-1.0') 2.5YR6/3 Munsell light yellowish brown (1.0-1.5') 10YR5/6 Munsell yellowish-brown SP	3/2/2/1	LEL/02 = 0/21 Analytical sample taken
S-3	10-12	2.0/1.5	BKGD	SAND, well graded, coarse to fine, 5-15% fines, 0-5% subrounded gravel, loose, damp (5.0-5.7') 10YR6/4 light yellowish brown (5.7-6.5') 10YR5/6 yellowish brown SW	2/5/3/3	LEL/02 = 0/21 Analytical sample taken
S-4	15-17	2.0/2.0	223	SAND, well graded, same as S-3, except saturated, 10YR5/6 Munsell yellowish-brown SW	2/4/3/2	LEL/02 = 0/21 Analytical sample taken
				Bottom of Exploration at 17.0'		

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917-04		BORING NO.: 50B-92-10X	
CLIENT: AEC			DATE STARTED: 6/22/92			GROUP: 6	
CONTRACTOR: D. L. Maher			DATE COMPLETED: 6/23/92			PROTECTION: Modified D	
METHOD: 6.65" HSA			BORING DIAMETER: 10" borehole			PID METER: 10.6 eV TE	
GROUND ELEV.: 223.2'			REFERENCE PT. ELEV.: NA			TOTAL DEPTH: 22'	
LOGGED BY: GF			CHECKED BY: DSP			WATER TABLE BGS: Approximately 10'	
SAMPLE NO.	DEPTH (ft)	PEN/REC (ft/ft)	PID OF SPOON (ppm)	SOIL DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6"	COMMENTS	
S-1	0-2	2.0/1.8	BKGD	SAND, well graded, coarse to fine, 5-10% fines, 0-5% subrounded gravel, medium dense, dry, 10YR5/3 Munsell brown (glacial outwash) SW	4/7/4/5	LEL/02 = 0/21 Analytical sample taken	
S-2	5-7	2.0/1.8	BKGD	(5.0-6.6') SILTY SAND, fine to medium, 10-15% fines, trace gravel, loose, dry, 10YR6/4 Munsell light yellowish-brown SM (6.6-7.0') SANDY SILT, 20-30% medium to fine sand, stiff, 10YR6/6 Munsell brownish yellow ML	3/5/5/6	Headspace PID = BKGD LEL/02 = 0/21 Analytical sample taken	
S-3	10-12	2.0/2.0	BKGD	SANDY SILT, same as 6.6-7.0', except firm, (10.0-11.8') saturated, 10YR6/3 Munsell pale brown ML (11.8-12.0') 10YR3/2 Munsell dark grayish brown ML	2/4/3/3	Headspace PID = BKGD LEL/02 = 0/21 Analytical sample taken, not enough for MS/MSD Grain size analysis performed.	
S-4	15-17	2.0/2.0	BKGD	SANDY SILT, same as S-3, saturated, 10YR5/4 Munsell yellowish-brown ML	4/4/2/4	LEL/02 = 0/21	
S-5	20-22	2.0/2.0	BKGD	SANDY SILT, same as S-3, except very stiff, saturated, 10YR5/4 Munsell yellowish-brown ML	3/5/11/11	LEL/02 = 0/21	
				Bottom of Exploration at 22'			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: 50B-93-11X / G6M-93-14X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 5808 OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 20'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: 10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.7	1.5	SAND, poorly graded, fine to medium, 5% gravel, 5 - 12% fines, medium dense, dry, dark grayish brown	5-6-7-11	SP-SM	
S-2	5-7	2.0/1.8	5.7	Top 1.0 - SAND, poorly graded, very fine sand, 5 - 12% fines, medium dense, dry, very pale brown Bottom 1.0 - Sandy SILT, 20 - 40% fine sand, stiff, moist to wet	5-6-7-7	SP-SM ML	Odor present.
S-3	10-12	2.0/1.8	BG	Sandy SILT, 20 - 40% fine sand, stiff, saturated	7-7-7-9	ML	
<p align="center">BOE at 20'. Monitoring well G6M-93-14X installed at this location.</p>							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: 50B-93-12X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: ~10.5'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.7	0.5	SAND, poorly graded, fine to medium, 2 - 5% gravel, 0 - 5% fines, loose, dry, grayish brown	2-3-4-5	SP	
S-2	5-7	2.0/0.1	BG	- no recovery -	5-4-4-5		
S-3	7-9	2.0/1.8	50/100	Top 1.0' - Sandy SILT, stiff, wet, grayish brown. Bottom 1.0' - Silty SAND, poorly graded, 20 - 40% fines, medium dense, wet, pale brown	4-4-8-6	ML SM	Strong odor; product present within silt.
S-4	10-12	2.0/1.8	50/100	Silty SAND, poorly graded, 20 - 40% fines, medium dense, saturated, pale brown	4-5-6-4	SM	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.04		BORING NO.: 50B-93-13X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED:			PROTECTION: Modified D	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: ~10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.6	BG	SAND, poorly graded, fine to medium, 5 - 12% fines, loose, dry, brown	5-5-5-4	SP-SM	
S-2	5-7	2.0/1.8	BG	SAND, poorly graded, fine, 12 - 15% fines, medium dense, dry, light gray	6-6-6-7	SM	
S-3	7-9	2.0/1.8	2.0	Silty SAND, poorly graded, fine, 20 - 40% fines, medium dense, damp to moist, light brownish gray	5-5-6-7	SM-ML	Reference
S-4	10-12	2.0/1.8	0.5	Sandy SILT, 20 - 40% fine sand, stiff, saturated, light brownish gray	4-5-7-9	ML	
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 50B-93-14X	
CLIENT: AEC			DATE STARTED: 6/3/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/3/93			PROTECTION: D/C	
METHOD: HSA			BORING DIAMETER:			PID METER: Model 580B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: 10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.3	7-9	SAND, poorly graded, fine to medium, 5 - 8% gravel, 5 - 12% fines, loose, dry, very dark grayish brown	4-2-4-4	SP-SM	
S-2	2-4	2.0/1.4	10-70	Sandy SILT, 30 - 40% fine sand, stiff, damp, olive brown	4-3-8-13	ML-SM	
S-3	4-6	2.0/0.8	9-10	Silty SAND, poorly graded, fine, 15 - 35% fines, medium dense, dry, yellowish brown	31-14-10-8	SM	
S-4	6-8	2.0/1.4	5-20	Sandy SILT, 15 - 40% fine sand, stiff, damp to moist, grayish brown	4-5-10-10	ML-SM	
S-5	8-10	2.0/1.5	10-40	Silty SAND, poorly graded, fine, 20 - 40% fines, loose, moist to wet, light olive brown	6-5-5-7	SM	
S-6	10-12	2.0/2.0	5-10	Sandy SILT, 15 - 40% fine sand, stiff, saturated, light olive brown	4-4-7-6	ML-SM	

BOE at 12'

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 50B-93-15X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: D	
METHOD: HSA			BORING DIAMETER			PID METER: TE 580 B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: ~10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.0	BG	SAND, poorly graded, 5% gravel, 5 - 12% fines, medium dense, dry, very dark gray (10YR4/1)	4-5-10-19	SP-SM	
S-2	5-7	2.0/1.6	BG	SAND, well graded, 5 - 10% gravel, 0 - 5% fines, medium dense, dry, pale brown	6-6-10-6	SW	
S-3	7-9	2.0/1.6	BG	Silty SAND, poorly graded, fine, 20 - 40% fines, medium dense, moist to wet, light brownish gray	6-10-10-12	SM-ML	
S-4	10-12	2.0/2.0	BG	Sandy SILT, 15 - 30% fine sand, stiff, saturated, light brownish gray	3-6-7-8	ML-SM	reference only
BOE at 12'							

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 6917.07		BORING NO.: 50B-93-16X	
CLIENT: AEC			DATE STARTED: 6/2/93			STUDY AREA: 50	
CONTRACTOR: New Hampshire Boring			DATE COMPLETED: 6/2/93			PROTECTION: D	
METHOD: HSA			BORING DIAMETER:			PID METER: TE 580 B OVM	
GROUND ELEV:			REFERENCE PT. ELEV.:			TOTAL DEPTH: 12'	
LOGGED BY: S. Murray			CHECKED BY:			WATER TABLE BGS: ~10'	
SAMPLE NO.	DEPTH (ft.)	PEN./REC. (ft./ft.)	PID OF SPOON (ppm)	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	COMMENTS
S-1	0-2	2.0/1.0	BG	SAND, poorly graded, fine to medium, 5 - 7% fines, medium dense, dry, grayish brown (10YR5/2)	4-5-10-12	SP	
S-2	5-7	2.0/1.7	BG	Top 1.0': Sandy SILT, 15 - 40% fine sand, stiff, damp. Bottom 0.7': Silty SAND, poorly graded, very fine, 20 - 35% fines, loose, damp, light brownish gray	8-3-6-7	ML SM-ML	
S-3	10-12	2.0/2.0	BG	Sandy SILT, 15 - 40% fine sand, stiff, saturated, light olive brown	9-4-4-7	ML-SM	
BOE at 12'							

APPENDIX C
MONITORING WELL COMPLETION DIAGRAM

GROUP 3 MONITORING WELLS



ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 3
BORING No.: G3M-92-01X
GEOLOGIST: C. LYONS
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/29/92
TOP OF RISER ELEV.: 252.49'
GROUND SURF. ELEV.: 250.70'

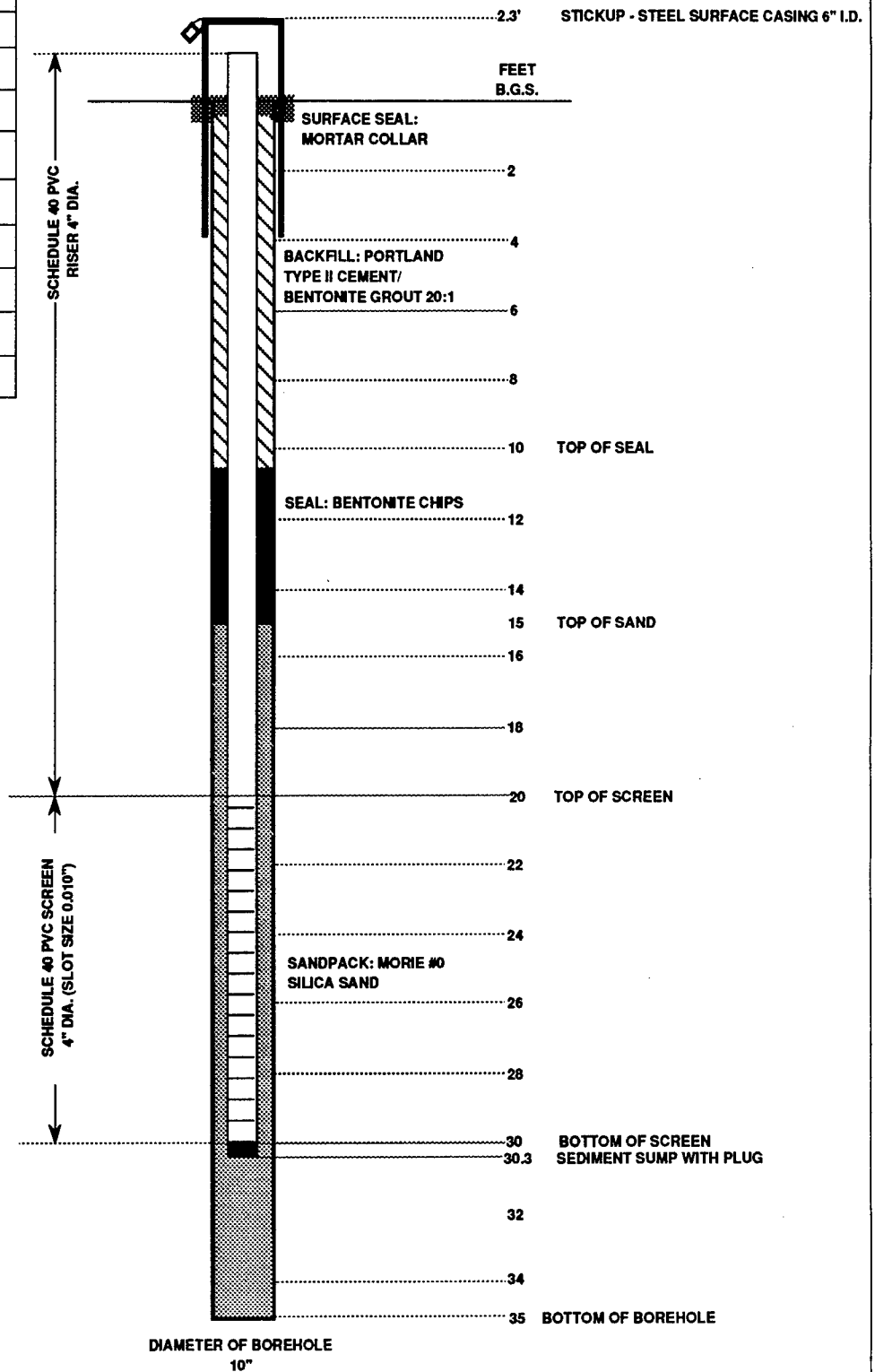




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: GROUP 3

BORING No.: G3M-92-02X

GEOLOGIST: C. LYONS

DRILLER: D.L MAHER

DRILLING METHOD: HSA

DATE INSTALLED: 7/1/92

TOP OF RISER ELEV.: 251.01'

GROUND SURF. ELEV.: 249.10'

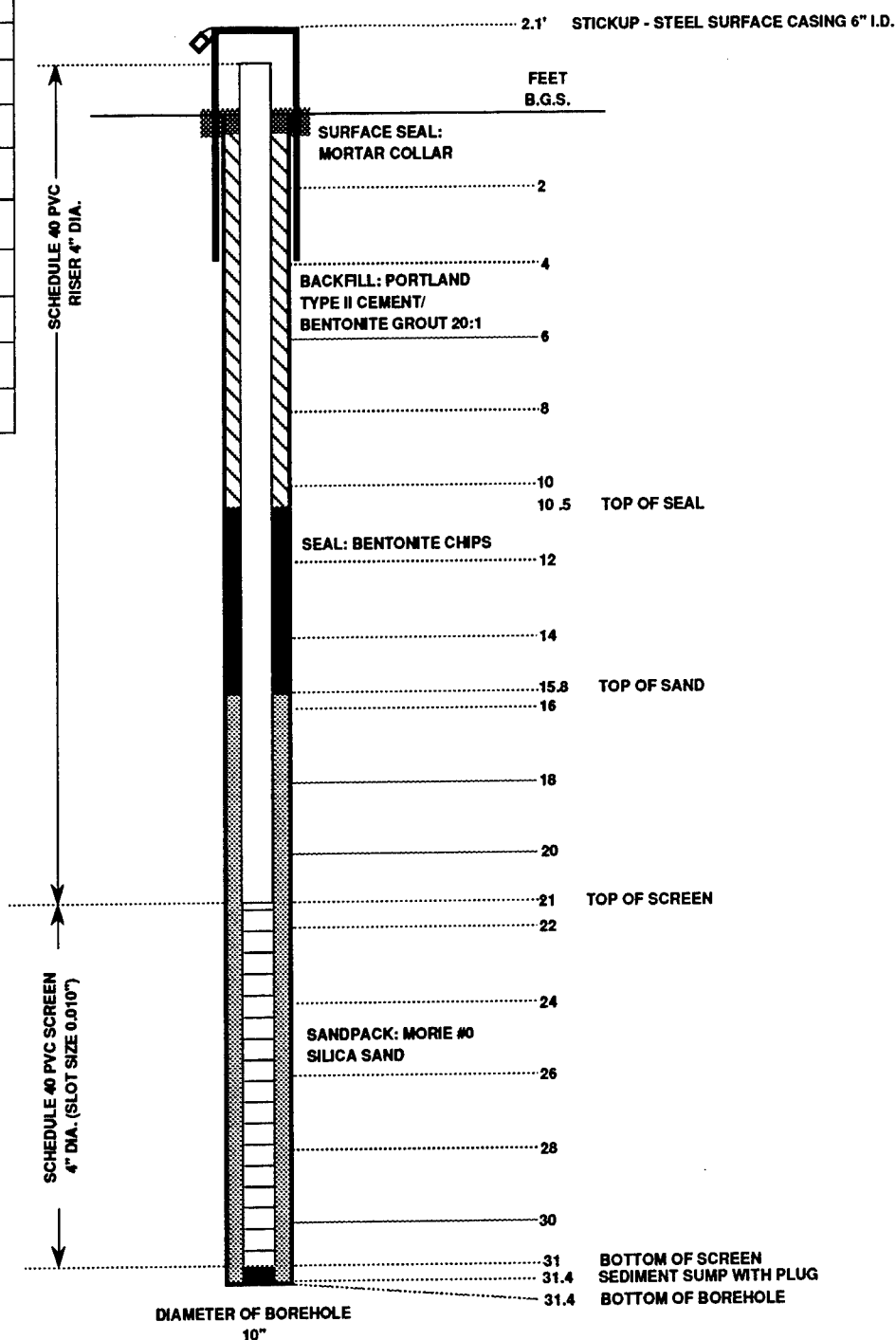




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 3
BORING No.: G3M-92-03X
GEOLOGIST: C. LYONS
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 7/1/92
TOP OF RISER ELEV.: 250.90'
GROUND SURF. ELEV.: 249.00'

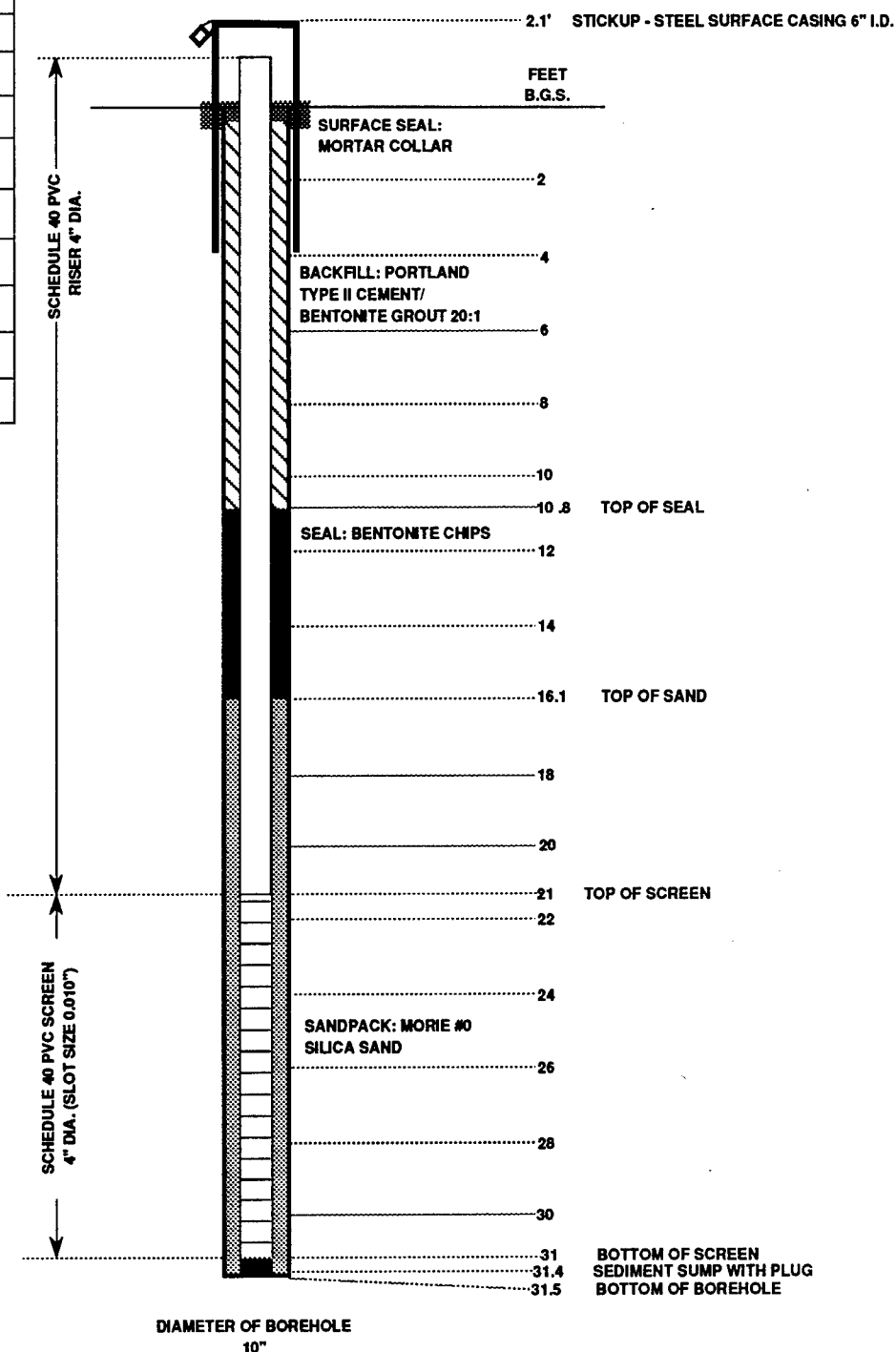




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: GROUP 3

BORING No.: G3M-92-04X

GEOLOGIST: J. RAWCLIFFE / J. CURULLA

DRILLER: D.L MAHER

DRILLING METHOD: HSA

DATE INSTALLED: 6/30/92

TOP OF RISER ELEV.: 252.89'

GROUND SURF. ELEV.: 251.00'

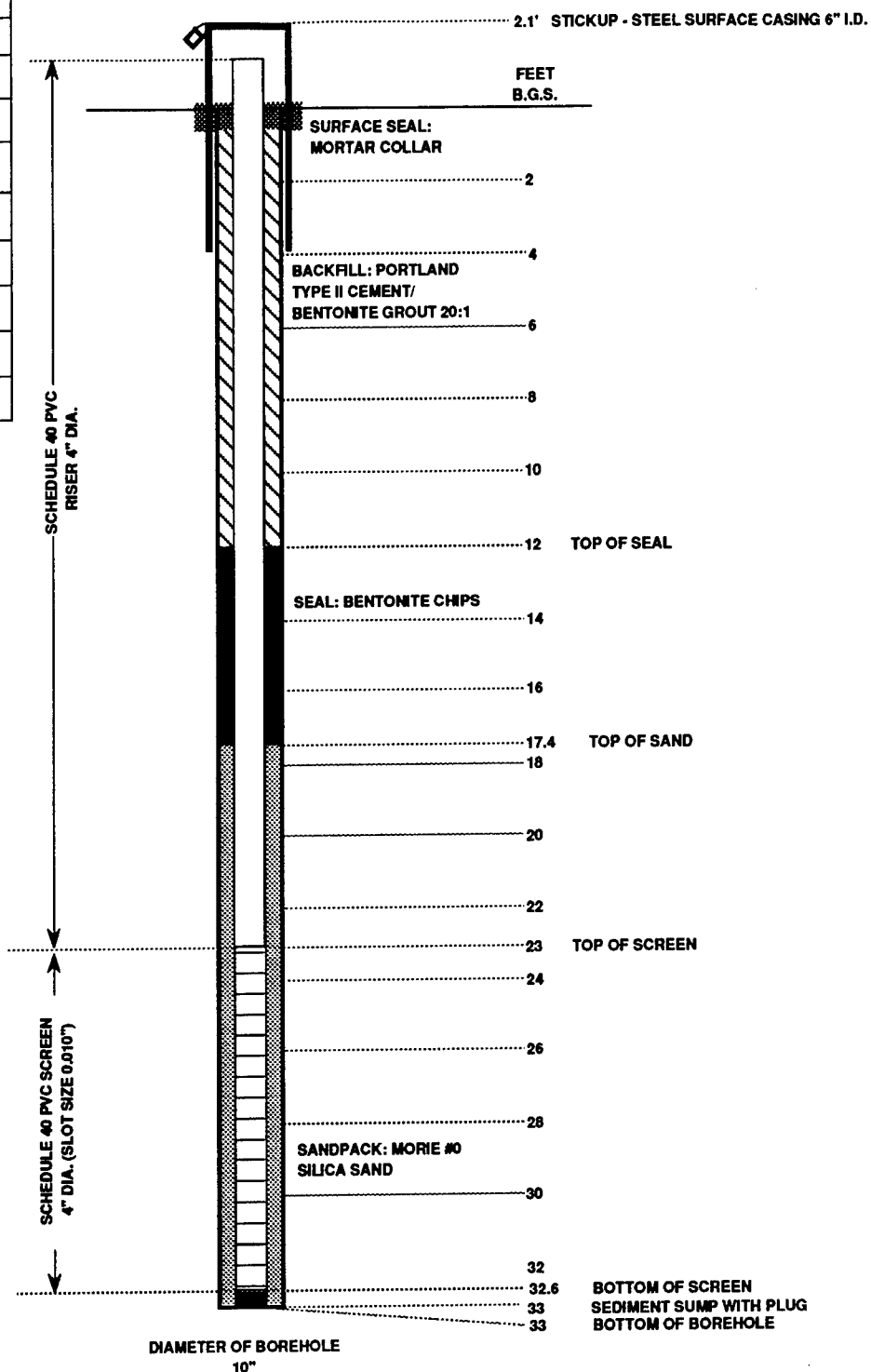




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: GROUP 3

BORING No.: G3M-92-05X

GEOLOGIST: J. RAWCLIFFE/J. CURULLA

DRILLER: D.L MAHER

DRILLING METHOD: HSA

DATE INSTALLED: 7/2/92

TOP OF RISER ELEV.: 254.30'

GROUND SURF. ELEV.: 252.20'

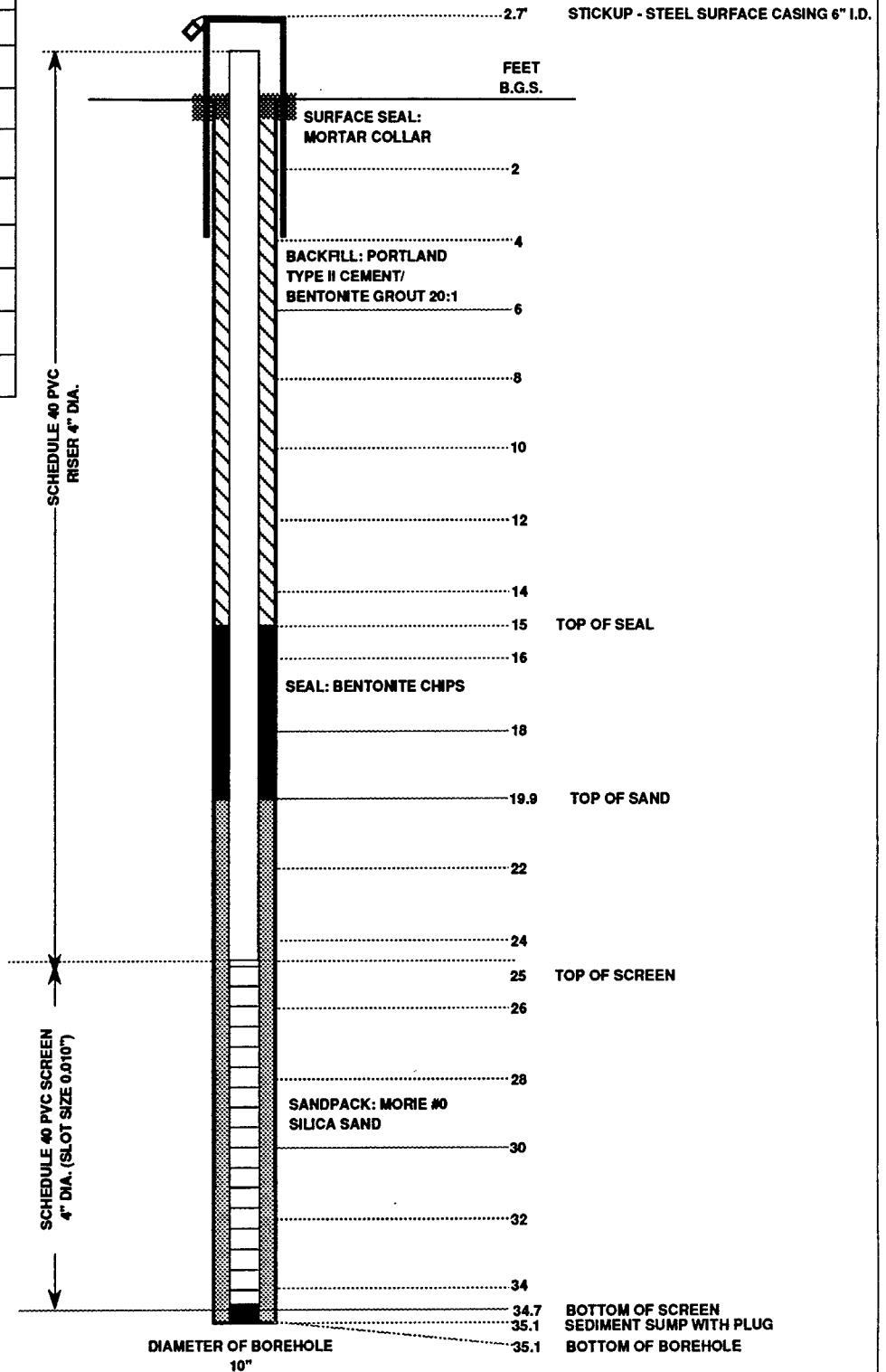




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 3
BORING No.: G3M-92-06X
GEOLOGIST: B. SCHOONARD/J. CURULLA
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 7/6/92
TOP OF RISER ELEV.: 253.71'
GROUND SURF. ELEV.: 251.70'

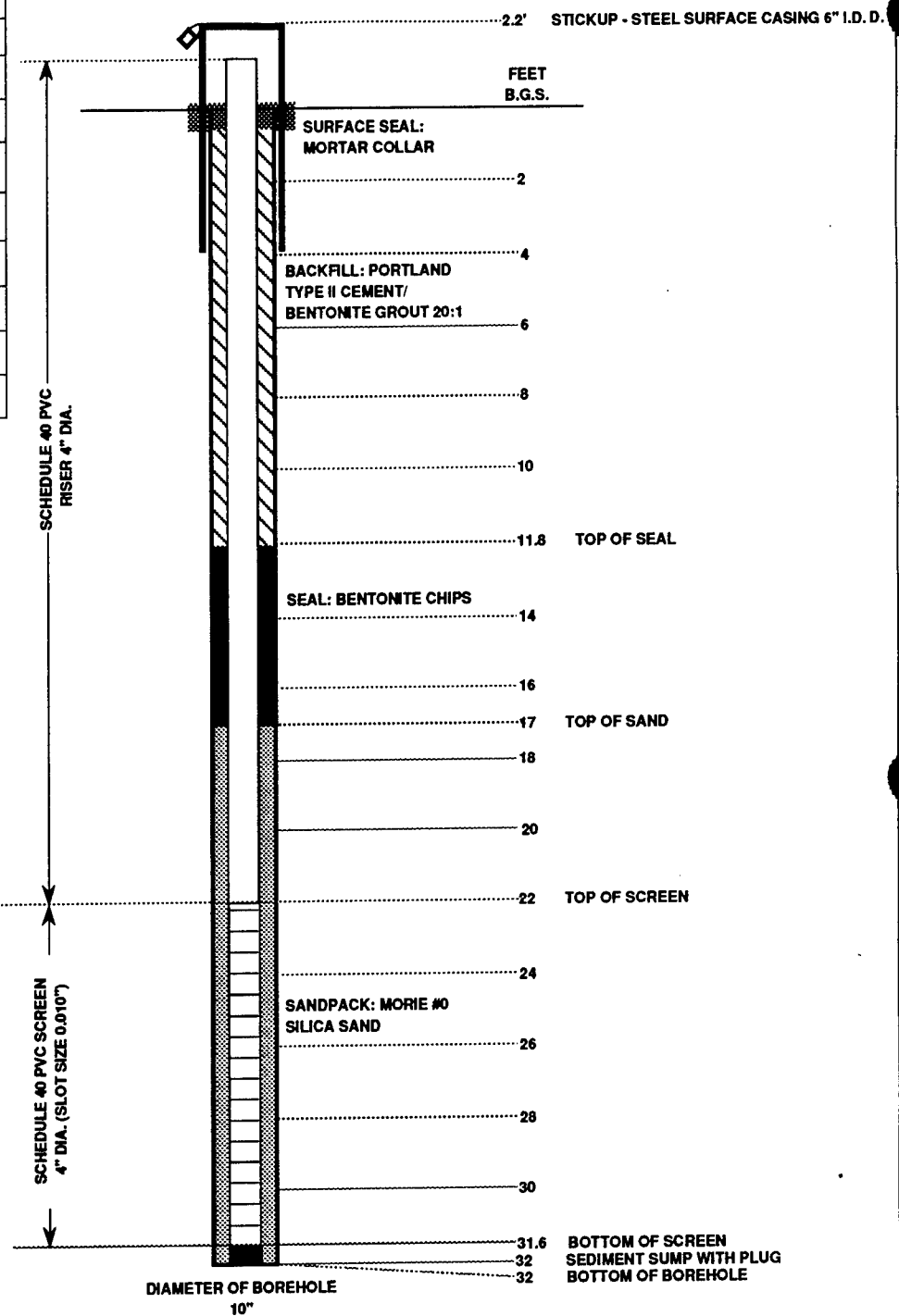




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 3
BORING No.: G3M-92-07X
GEOLOGIST: C. LYONS
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 7/2/92
TOP OF RISER ELEV.: 251.90'
GROUND SURF. ELEV.: 249.80'

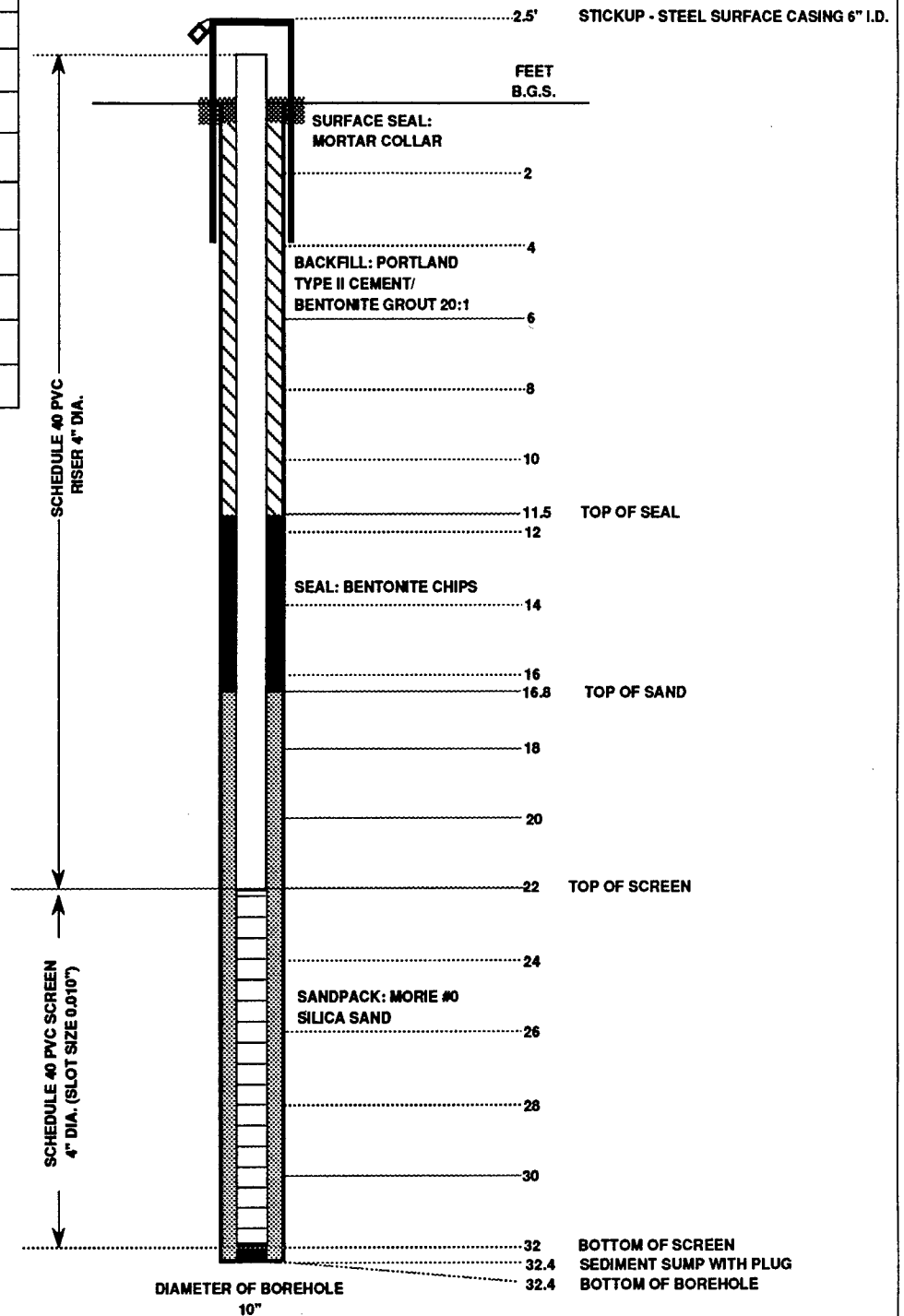




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: BATTERY REPAIR AREA
BORING No.: G3M-93-08X
GEOLOGIST: J. BELL, S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 5/27/93
TOP OF RISER ELEV.: 245.69'
GROUND SURF. ELEV.: 243.80'

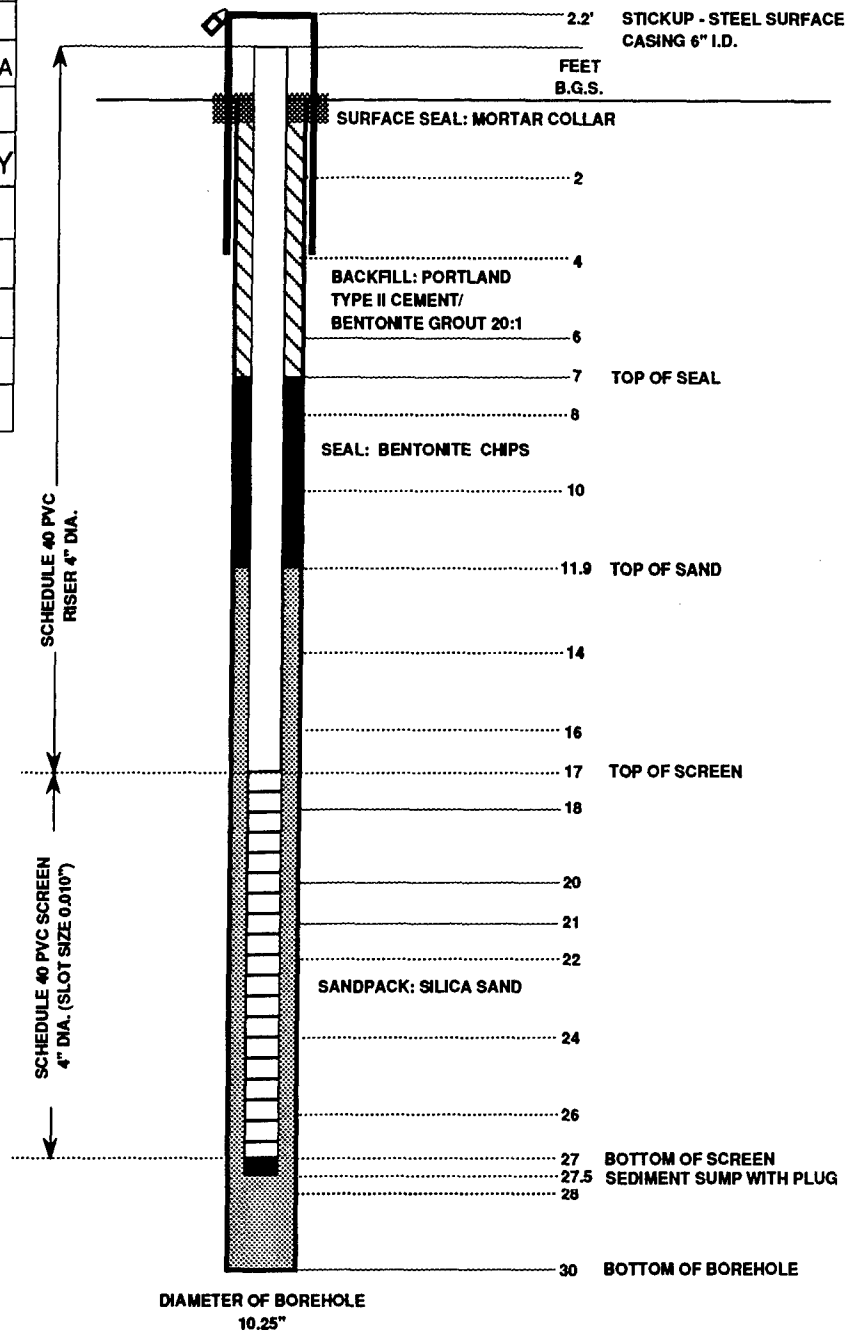




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: BATTERY REPAIR AREA
BORING No.: G3M-93-09X
GEOLOGIST: S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 5/26/93
TOP OF RISER ELEV.: 242.07'
GROUND SURF. ELEV.: 240.40'

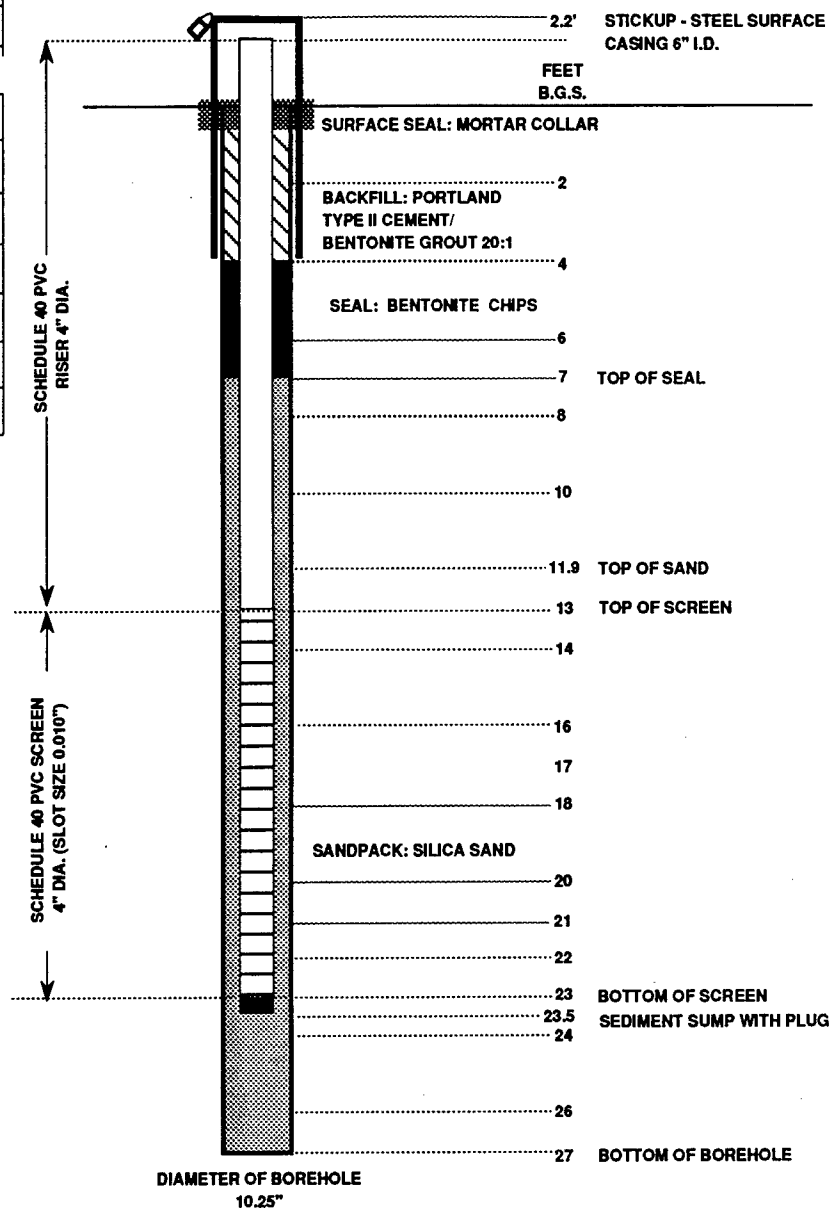




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: SAs 44 & 52
BORING No.: G3M-93-10X
GEOLOGIST: J. BELL, S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 5/28/93
TOP OF RISER ELEV.: 252.58'
GROUND SURF. ELEV.: 251.00'

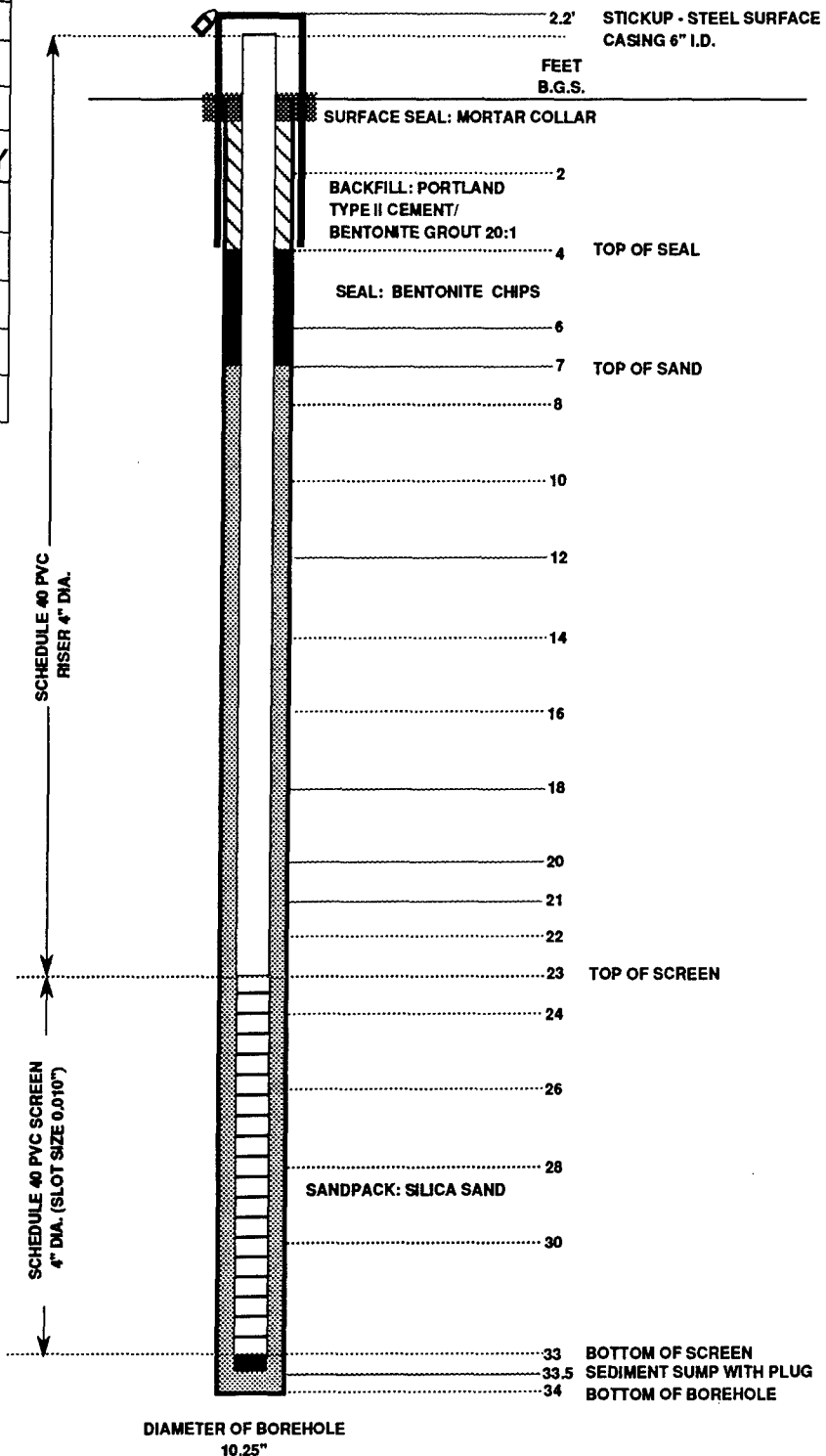
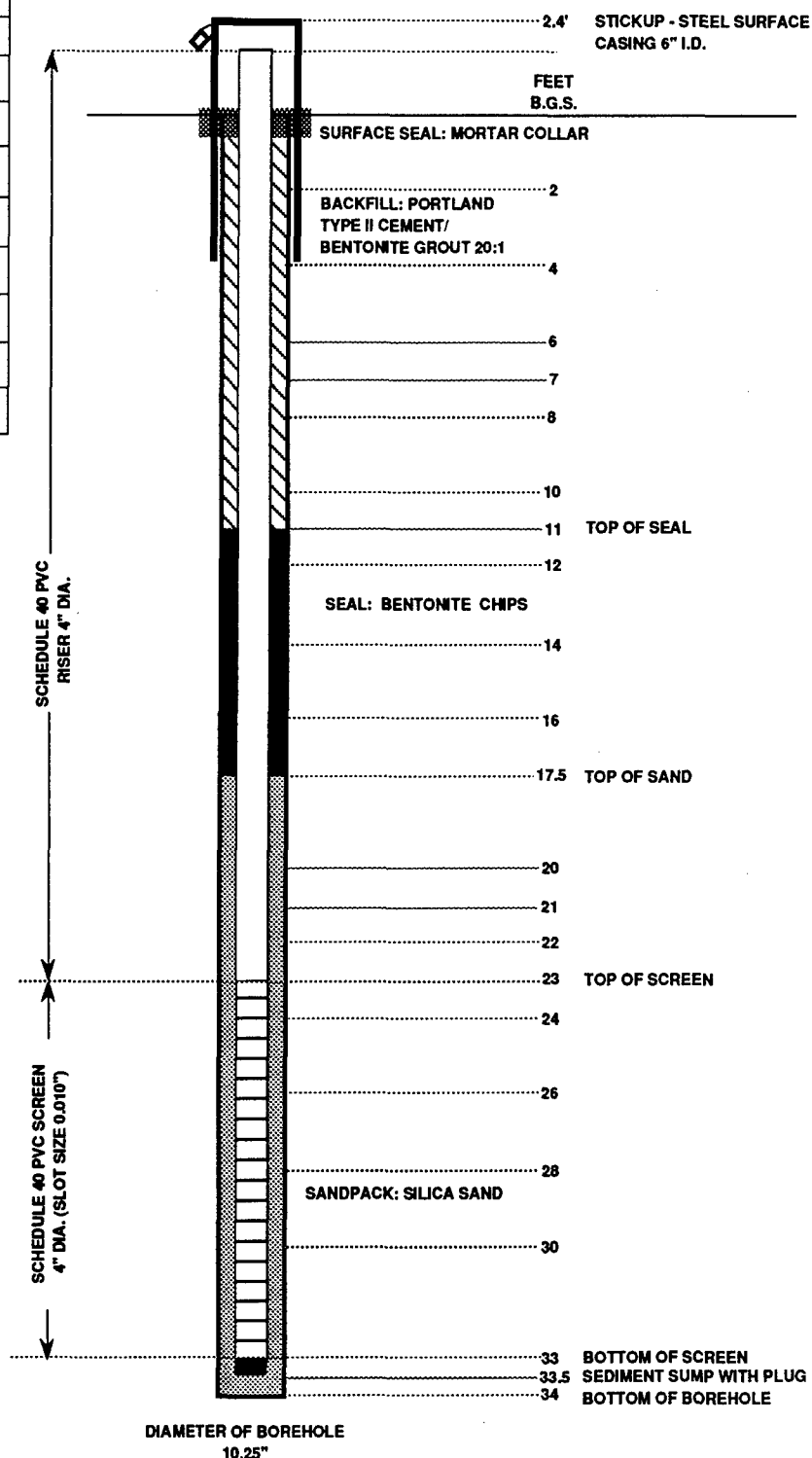




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: SAs 44 & 52
BORING No.: G3M-93-11X
GEOLOGIST: S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 5/28/93
TOP OF RISER ELEV.: 252.88'
GROUND SURF. ELEV.: 251.00'



GROUP 5 MONITORING WELLS



ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: NORTH POST LANDFILL
BORING No.: G5M-92-01X
GEOLOGIST: LNS
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/09/92
TOP OF RISER ELEV.: 240.45'
GROUND SURF. ELEV.: 238.70'

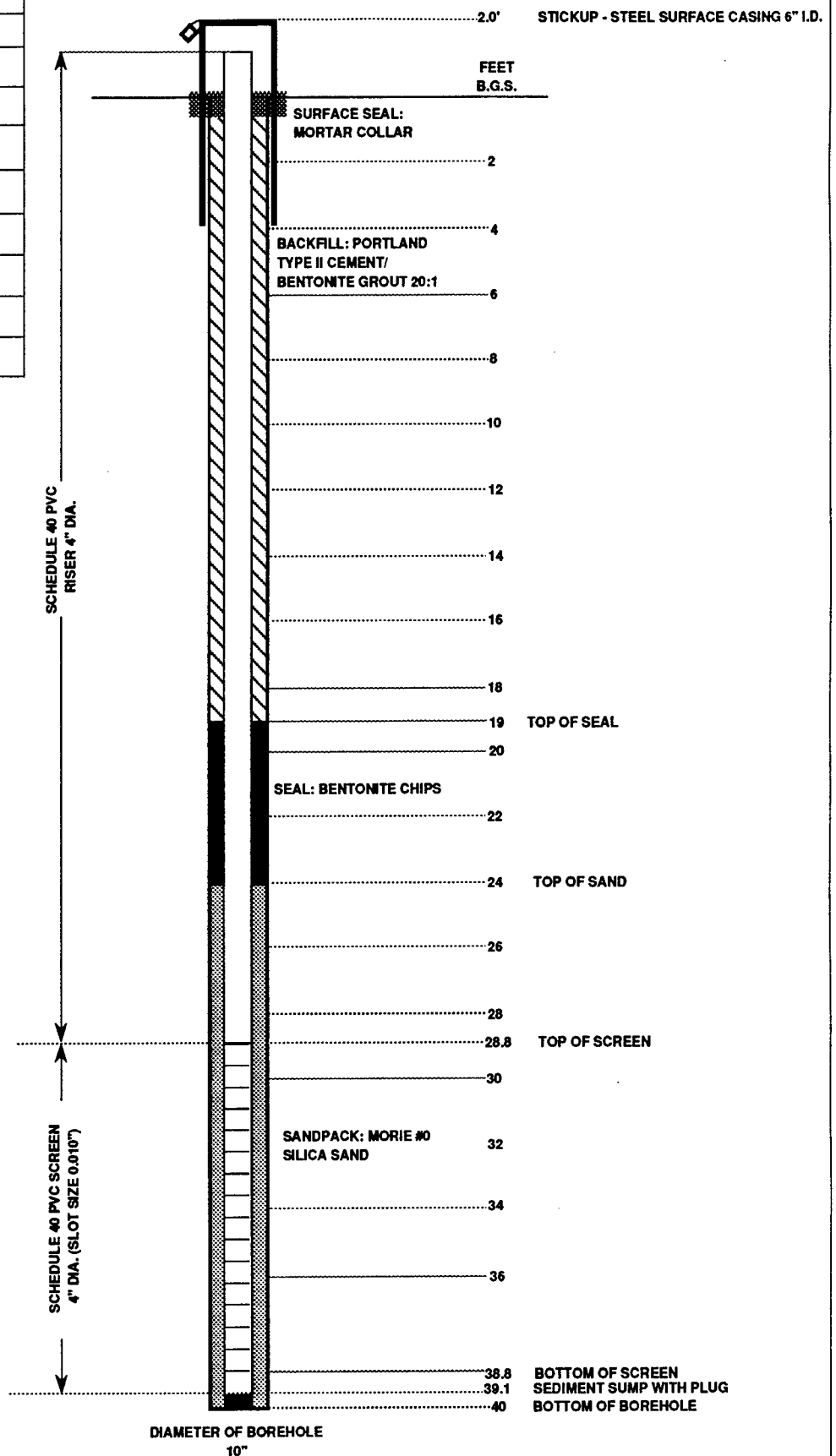




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: NORTH POST LF.
BORING No.: G5M-92-02X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/9/92
TOP OF RISER ELEV.: 224.73'
GROUND SURF. ELEV.: 222.10'

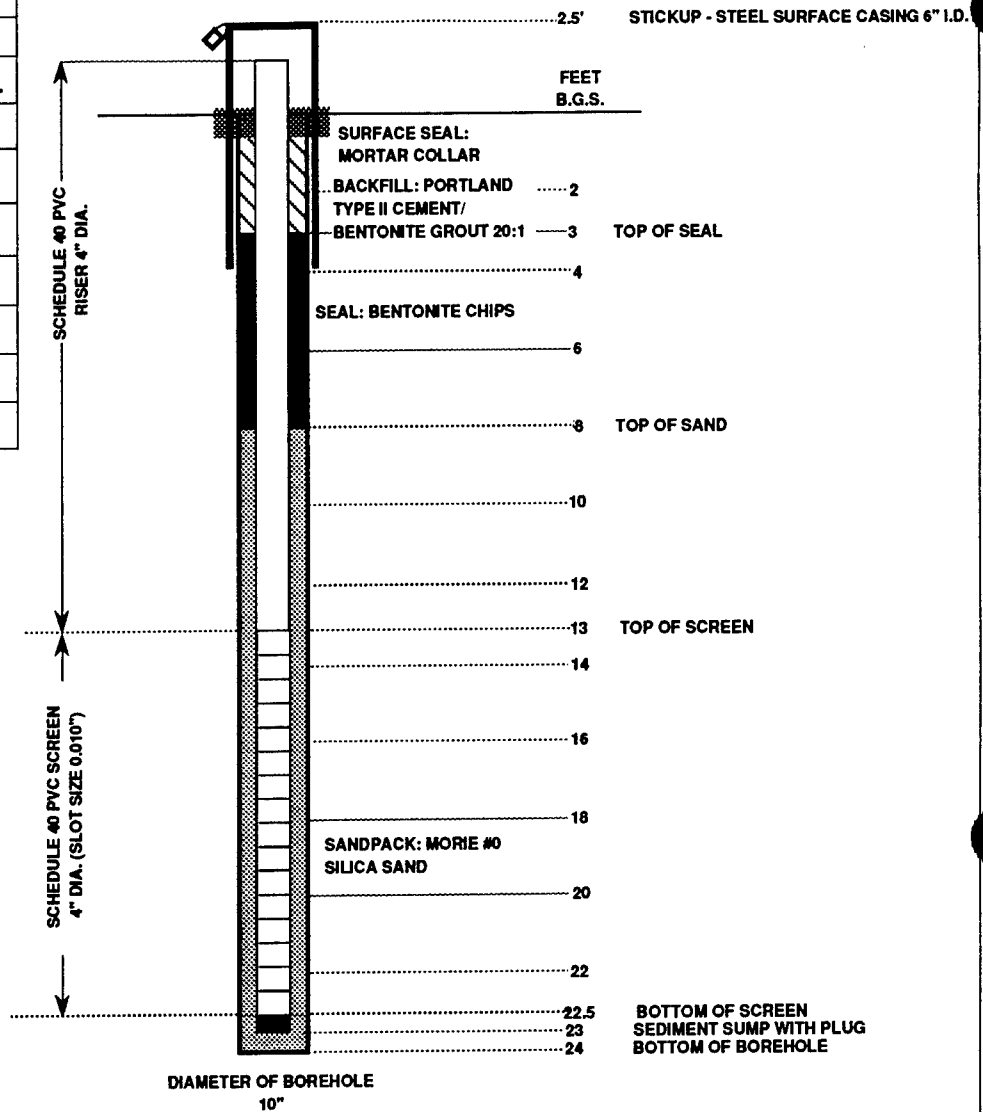
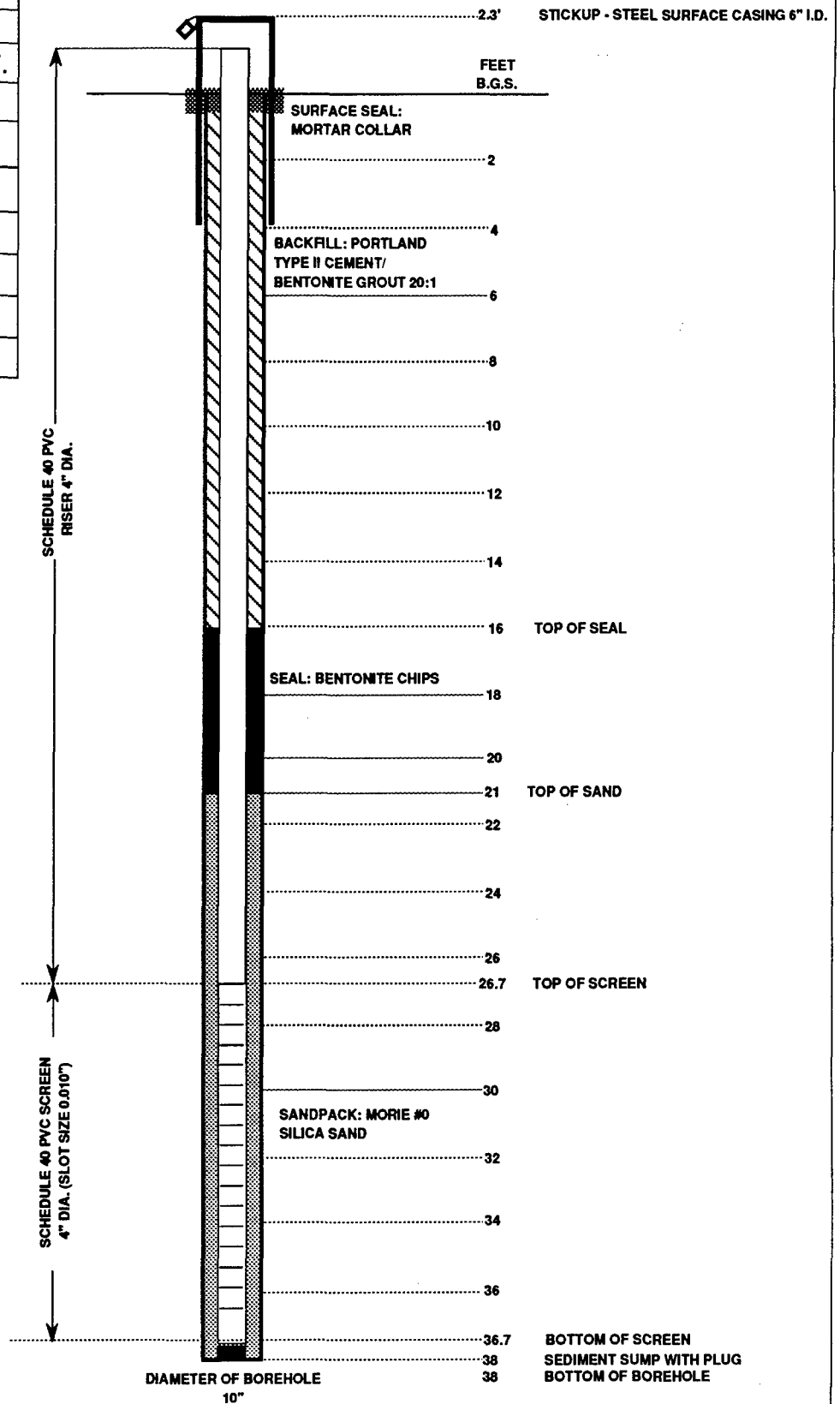




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: NORTH POST LF.
BORING No.: G5M-92-03B
GEOLOGIST: B. JOHNSON
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/19/92
TOP OF RISER ELEV.: 239.62'
GROUND SURF. ELEV.: 237.90'



GROUP 6 MONITORING WELLS



ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-01X
GEOLOGIST: NWH
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/17/92
TOP OF RISER ELEV.: 265.41'
GROUND SURF. ELEV.: 263.10'

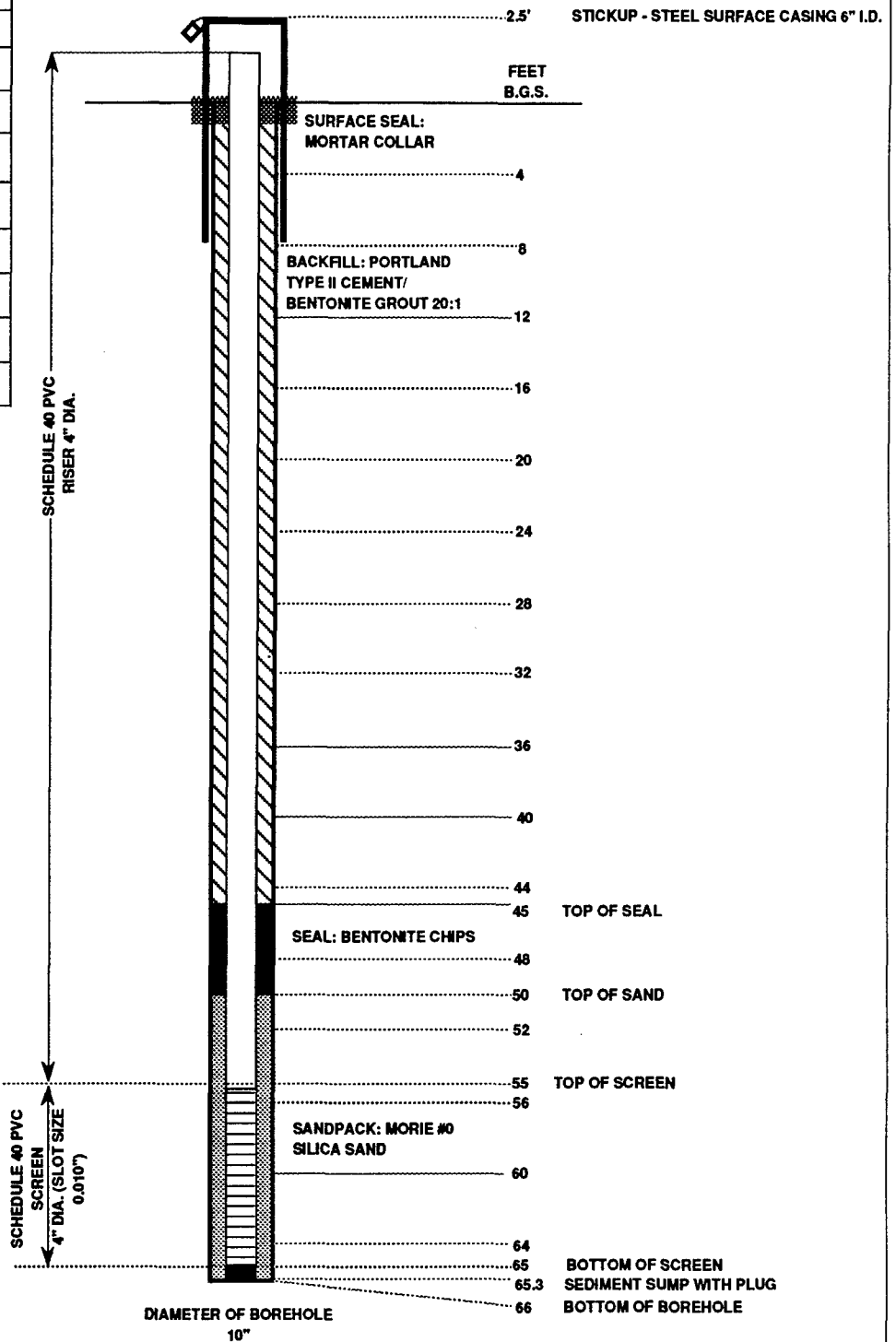




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-02X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/11/92
TOP OF RISER ELEV.: 271.00'
GROUND SURF. ELEV.: 268.60'

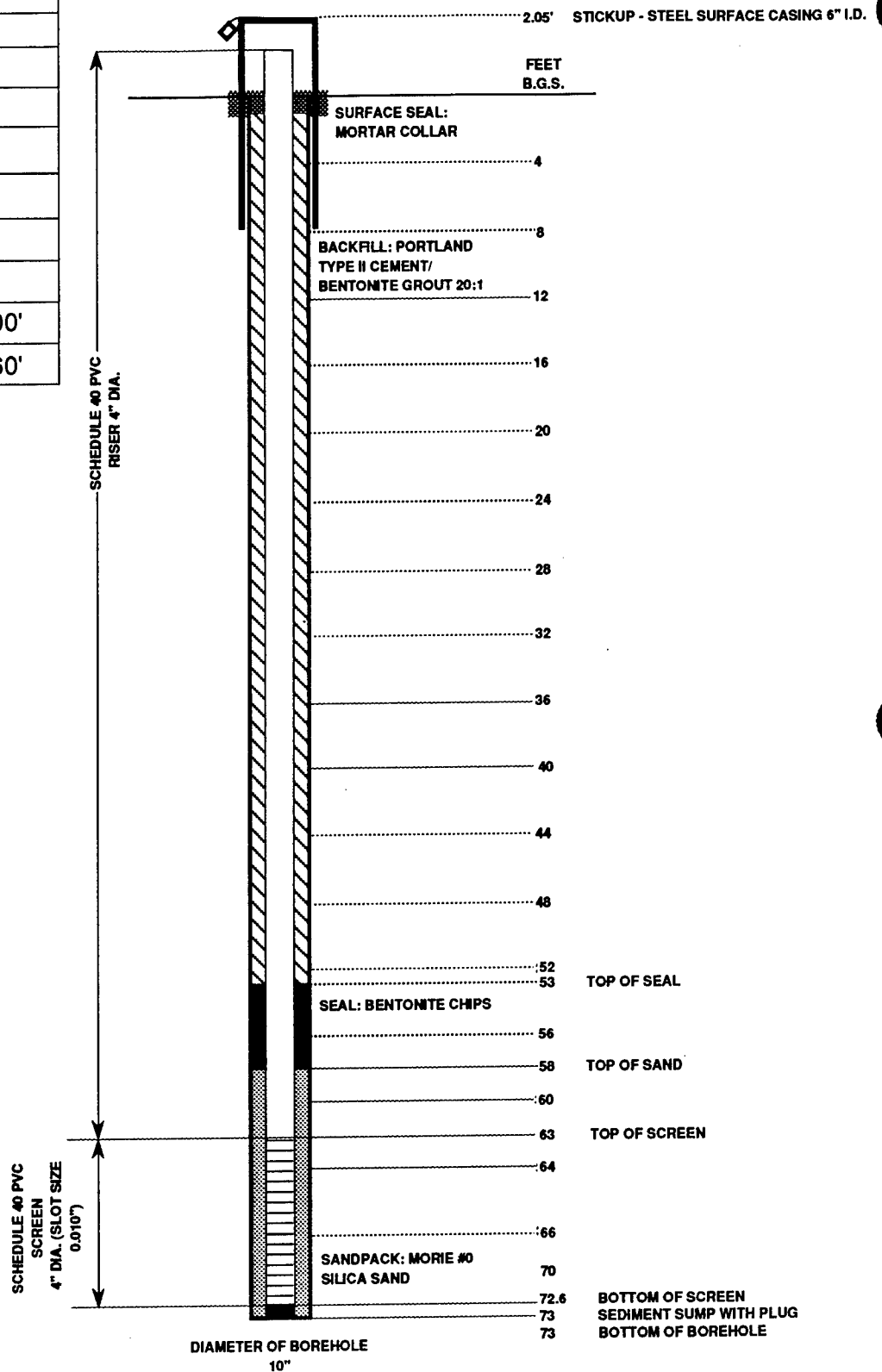




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-03X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/10/92
TOP OF RISER ELEV.: 269.53'
GROUND SURF. ELEV.: 267.00'

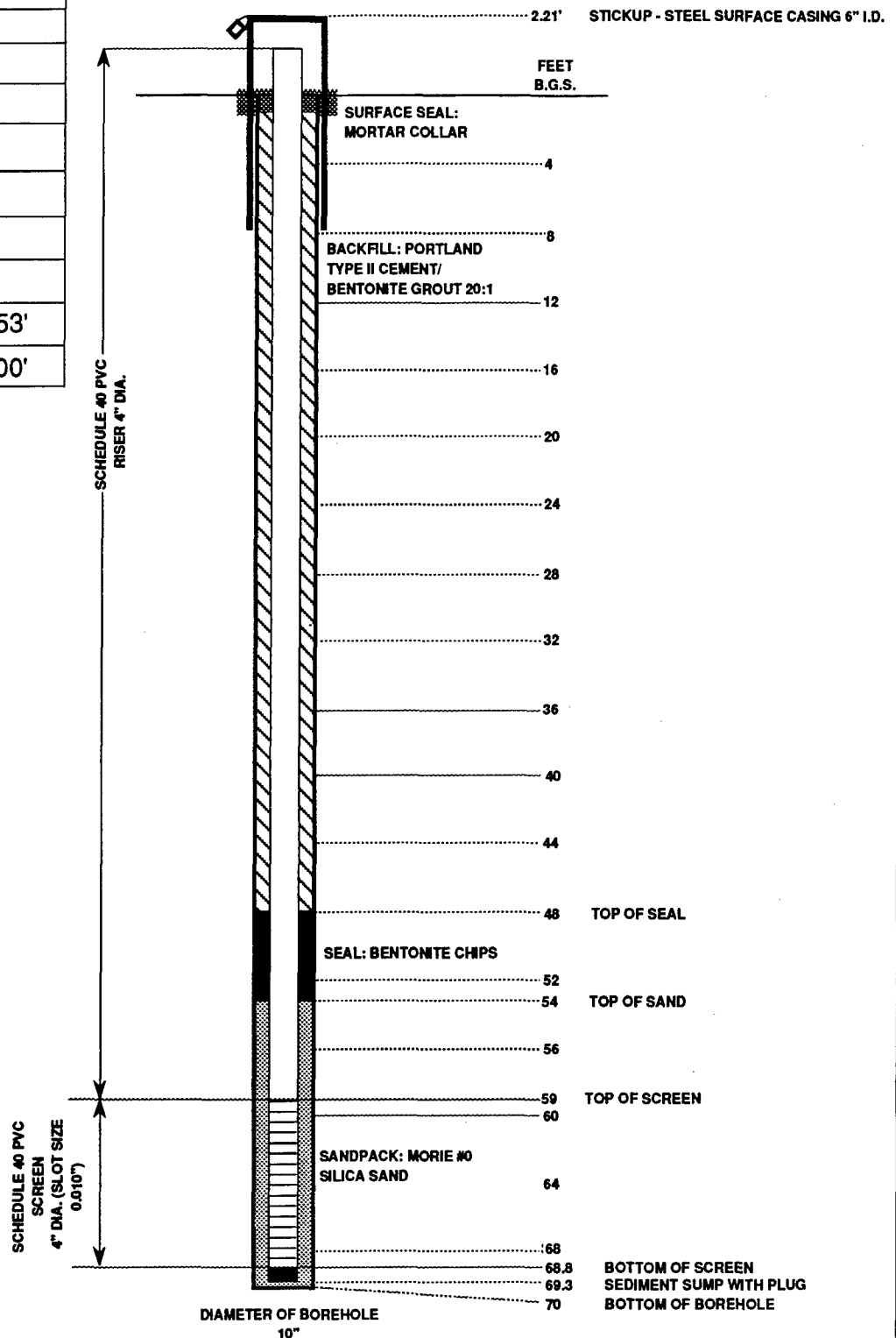




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: GROUP 6

BORING No.: G6M-92-04X

GEOLOGIST: R. RUSTAD

DRILLER: D.L MAHER

DRILLING METHOD: HSA

DATE INSTALLED: 6/16/92

TOP OF RISER ELEV.: 270.36'

GROUND SURF. ELEV.: 268.00'

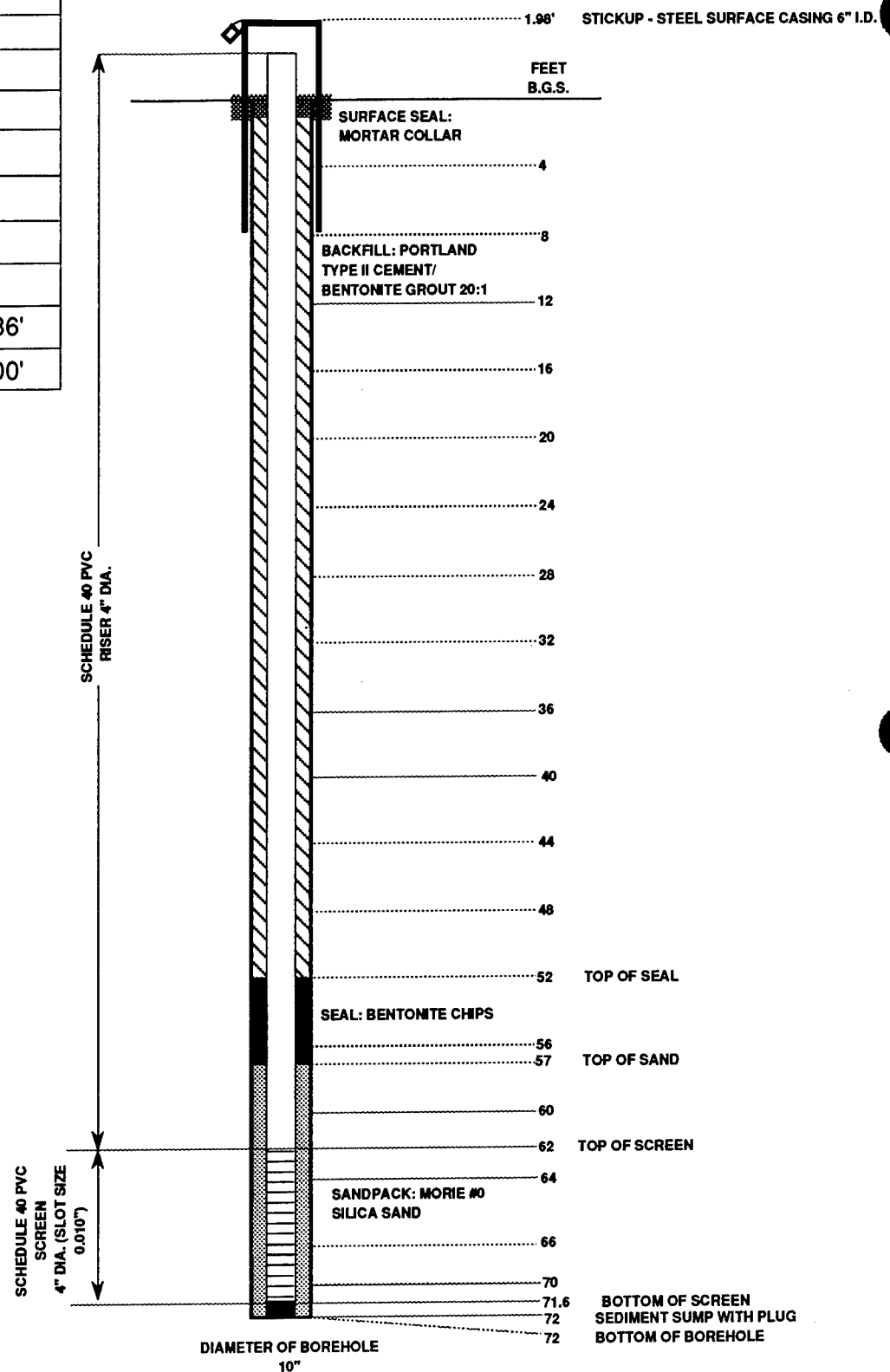




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-05X
GEOLOGIST: NWH, GCF
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/16/92
TOP OF RISER ELEV.: 268.88'
GROUND SURF. ELEV.: 266.40'

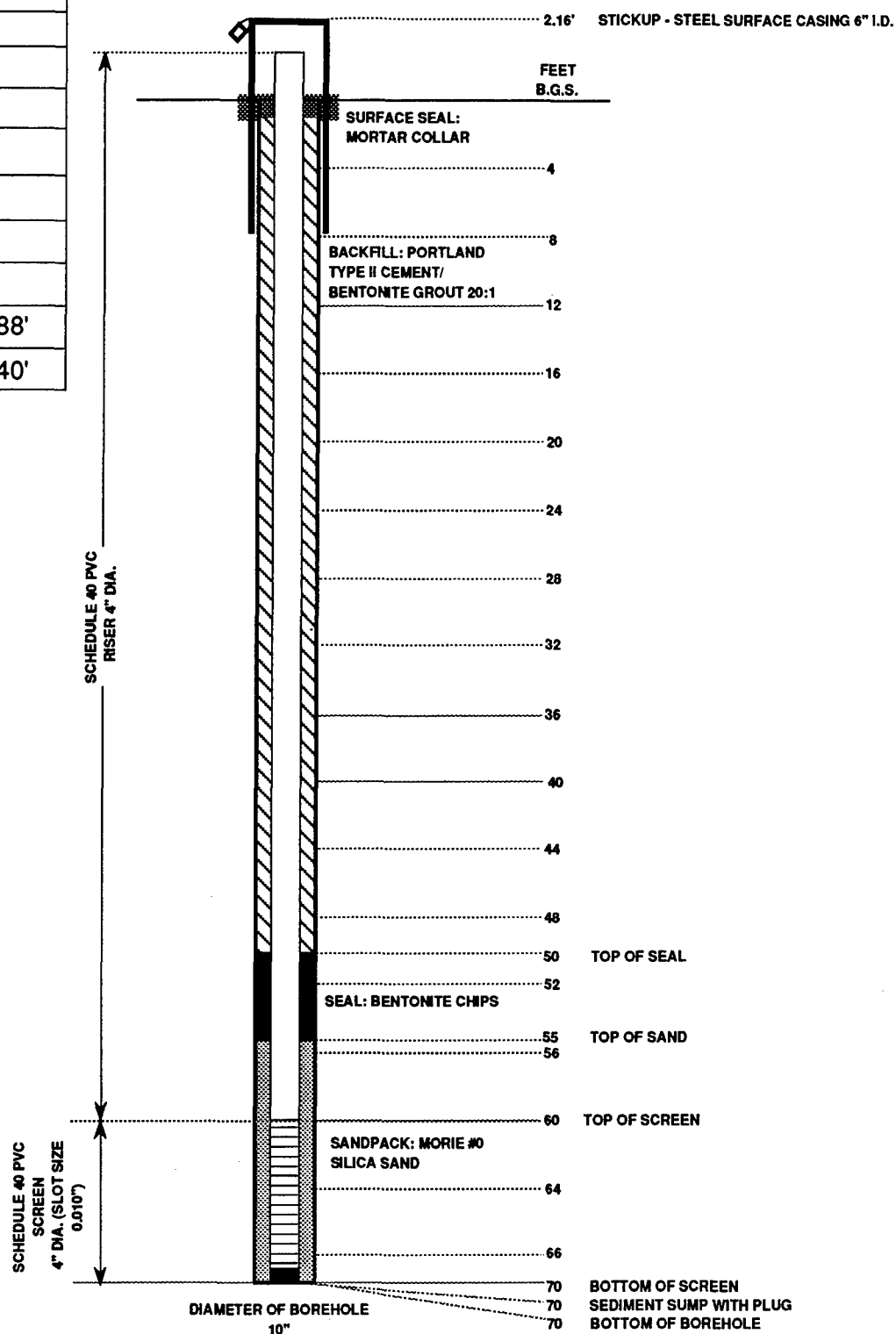




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: GROUP 6

BORING No.: G6M-92-06X

GEOLOGIST: R. RUSTAD

DRILLER: D.L MAHER

DRILLING METHOD: HSA

DATE INSTALLED: 6/17/92

TOP OF RISER ELEV.: 263.79'

GROUND SURF. ELEV.: 261.60'

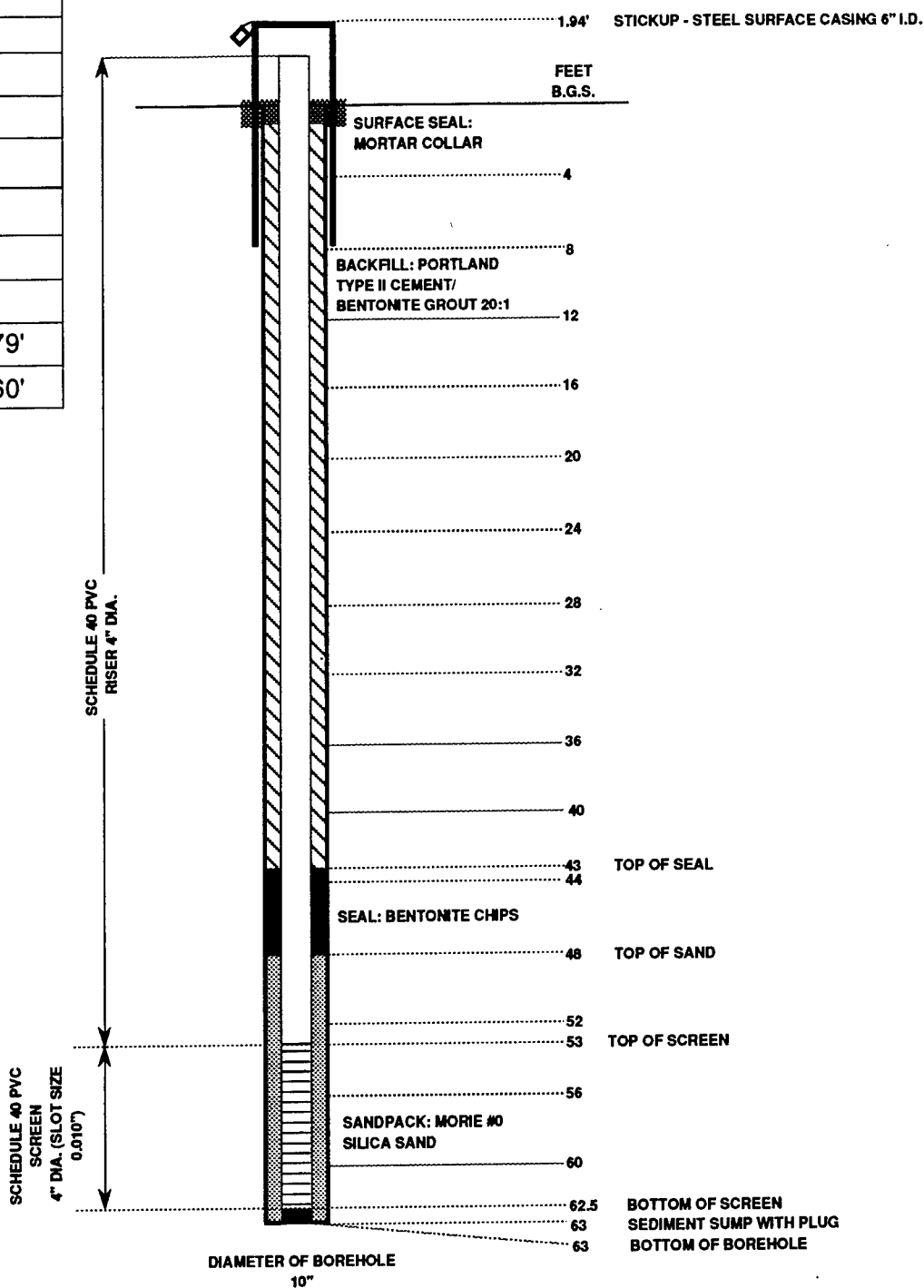




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-07X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/25/92
TOP OF RISER ELEV.: 266.86'
GROUND SURF. ELEV.: 264.40'

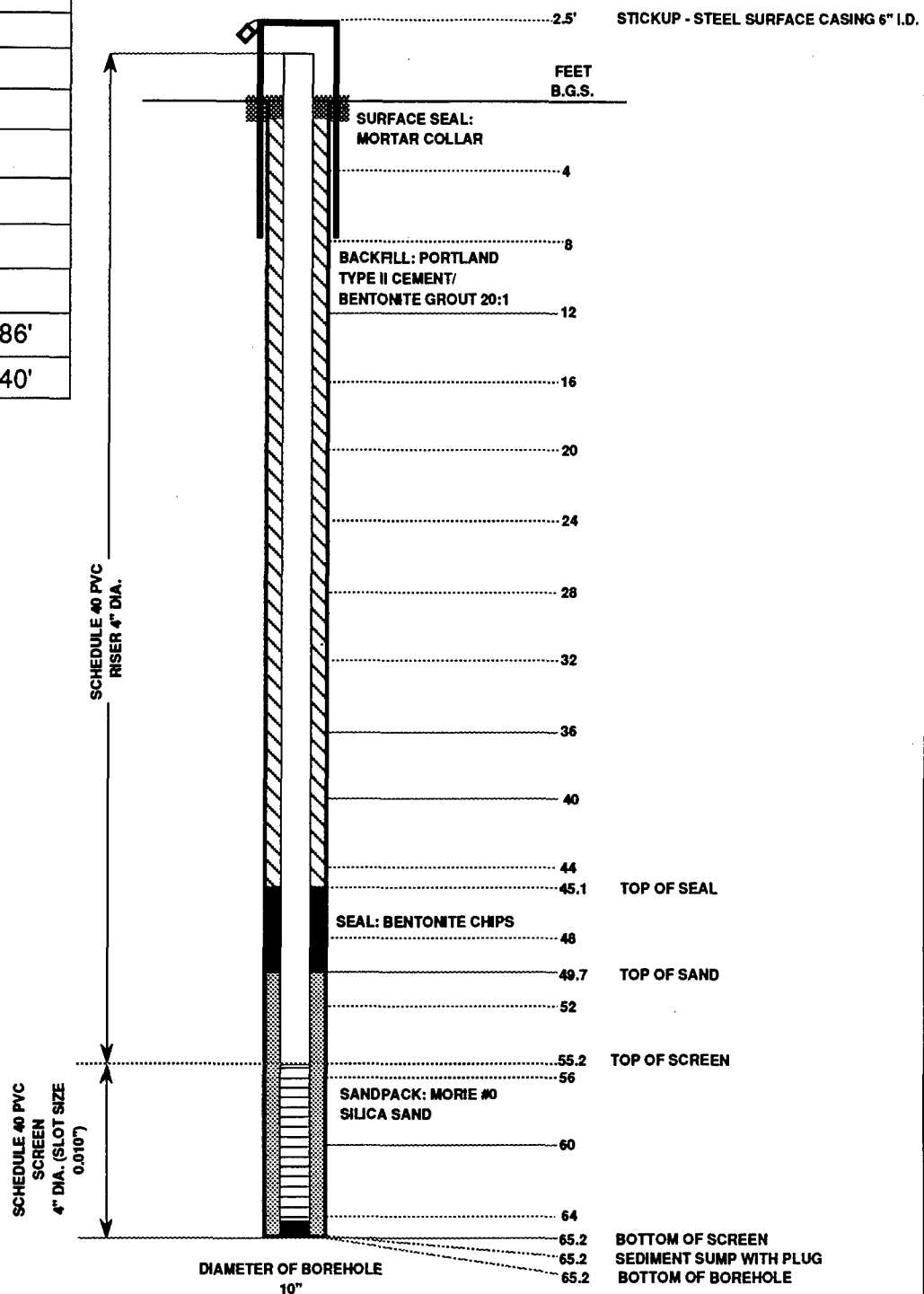




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-08X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/23/92
TOP OF RISER ELEV.: 262.94'
GROUND SURF. ELEV.: 263.20'

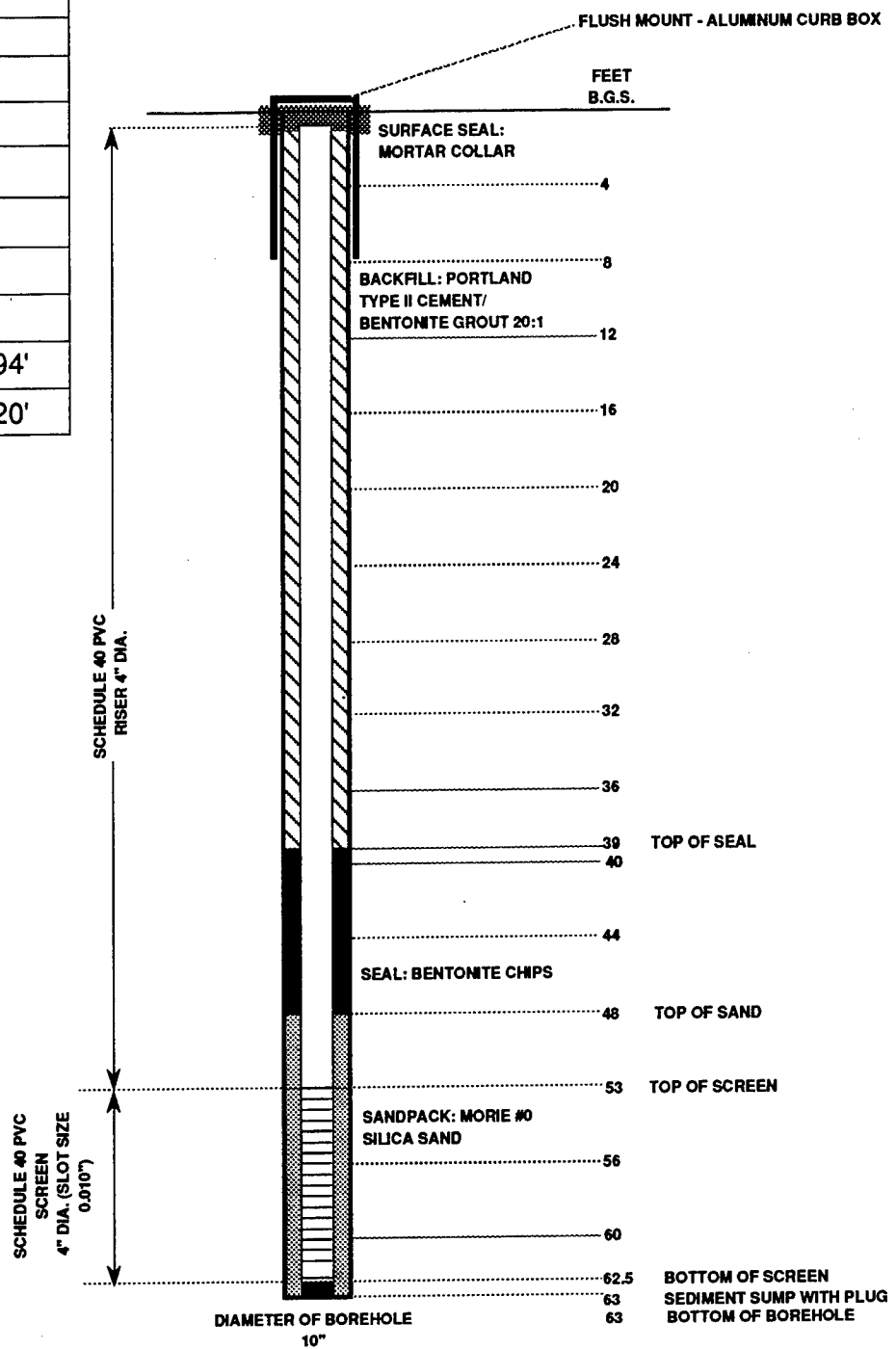




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: GROUP 6

BORING No.: G6M-92-09X

GEOLOGIST: R. RUSTAD

DRILLER: D.L MAHER

DRILLING METHOD: HSA

DATE INSTALLED: 6/19/92

TOP OF RISER ELEV.: 261.25'

GROUND SURF. ELEV.: 258.60'

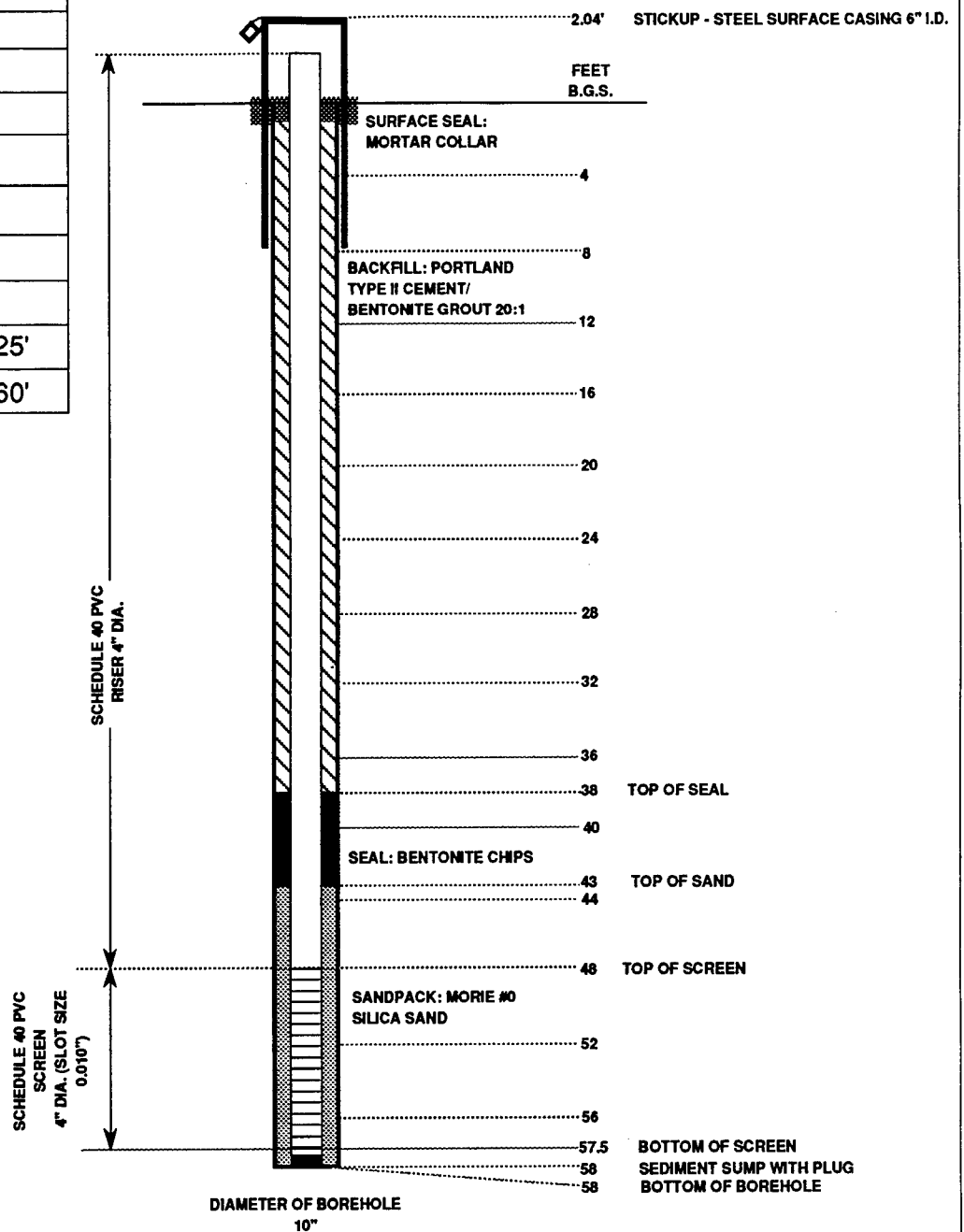




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-92-10X
GEOLOGIST: C. LYONS
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/24/92
TOP OF RISER ELEV.: 225.81'
GROUND SURF. ELEV.: 223.20'

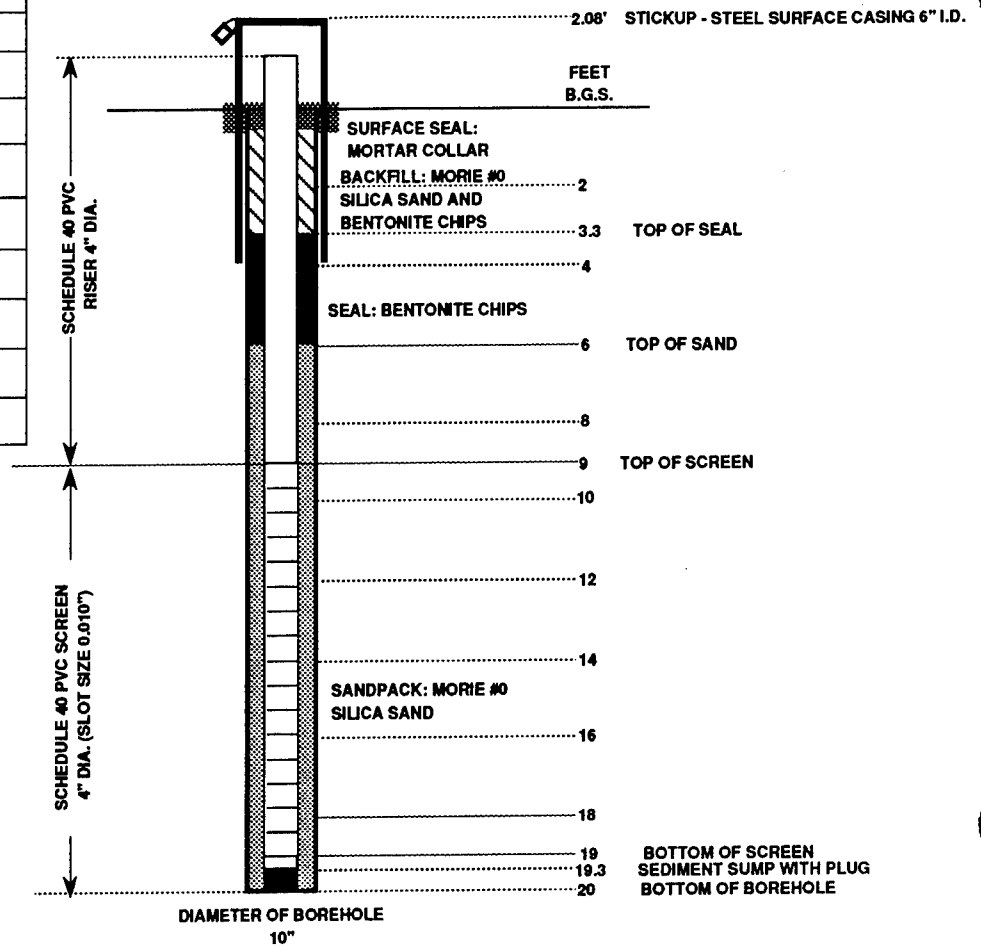




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-92-11X
GEOLOGIST: G. FLAHERTY
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/24/92
TOP OF RISER ELEV.: 225.62'
GROUND SURF. ELEV.: 223.20'

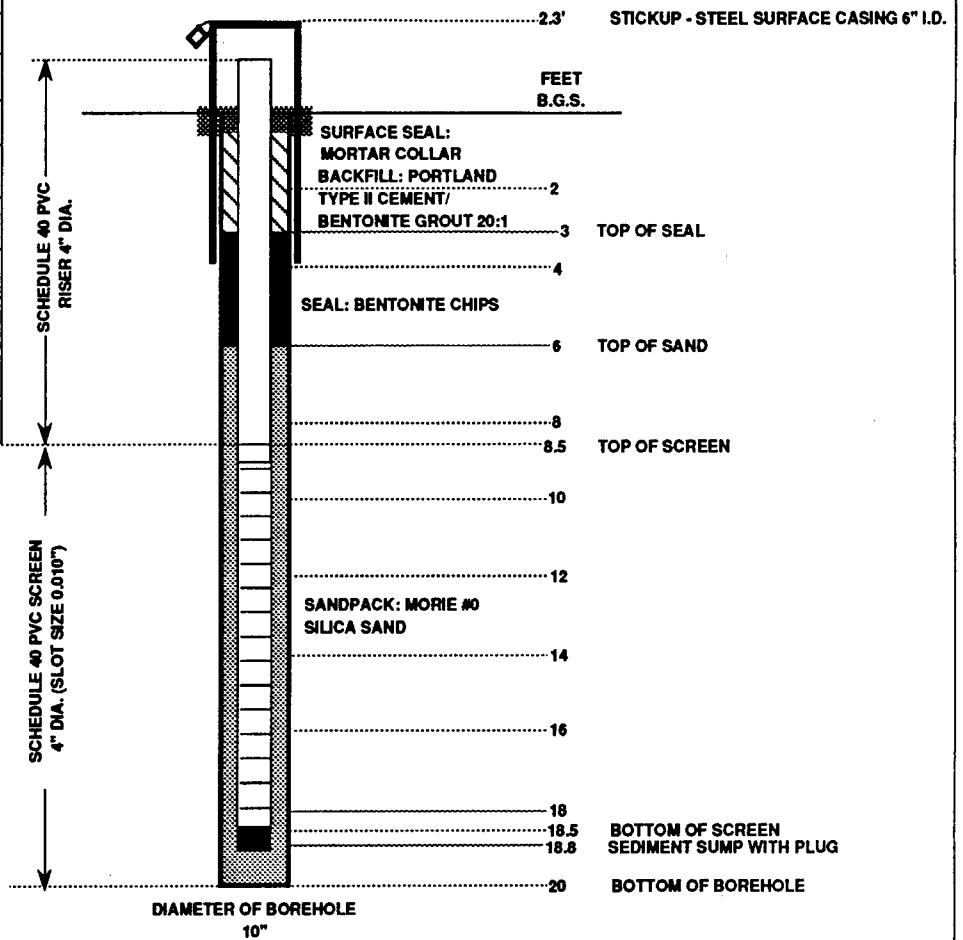




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: WWII FUEL POINT

BORING No.: G6M-93-12X

GEOLOGIST: S. MURRAY

DRILLER: NHB

DRILLING METHOD: 6.25"HSA

DATE INSTALLED: 6/2/93

TOP OF RISER ELEV.: 224.73'

GROUND SURF. ELEV.: 223.10'

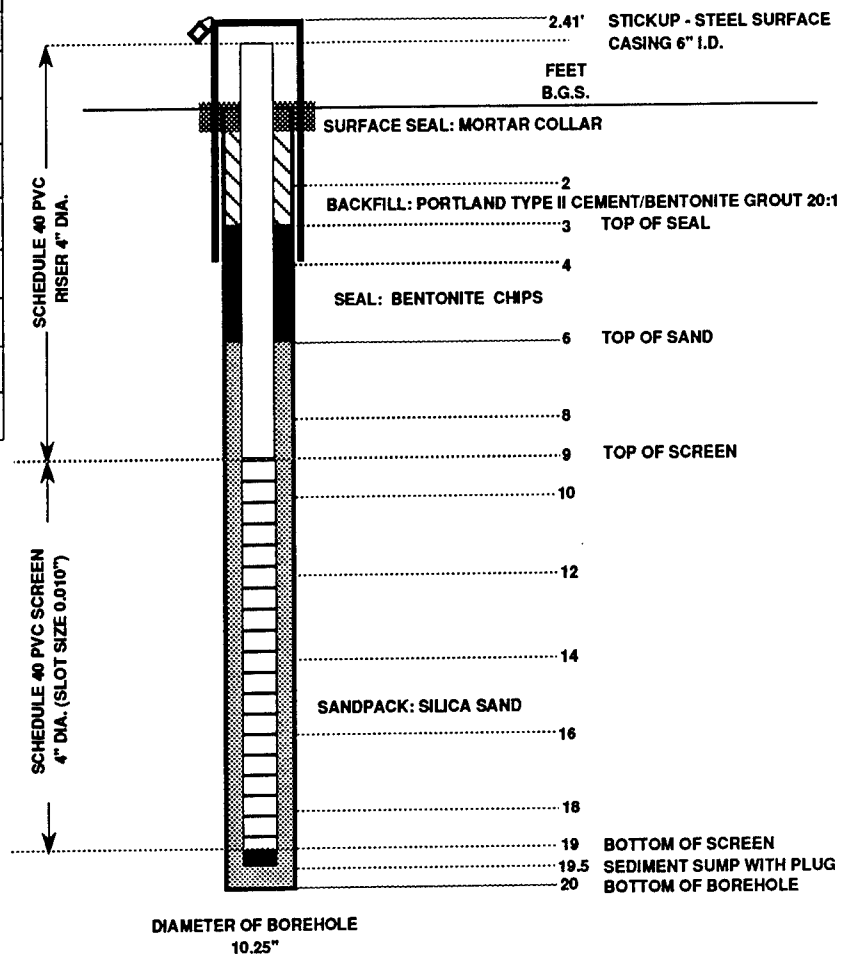




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-93-13X
GEOLOGIST: S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 6/1/93
TOP OF RISER ELEV.: 225.58'
GROUND SURF. ELEV.: 223.70'

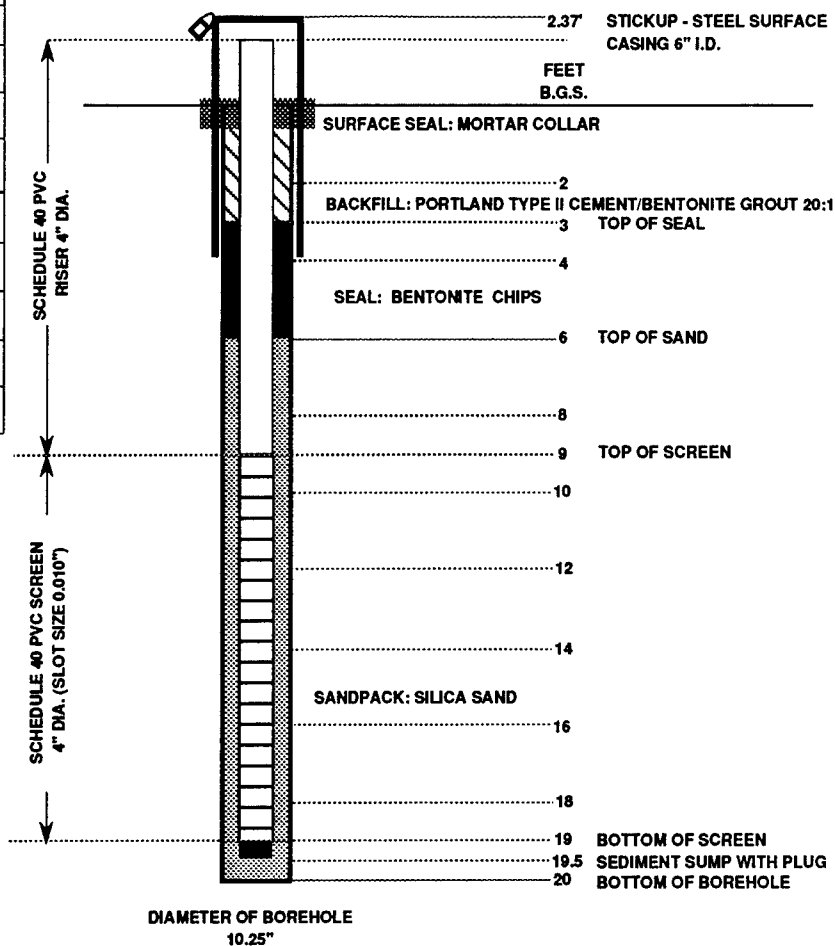




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: WWII FUEL POINT

BORING No.: G6M-93-14X

GEOLOGIST: S. MURRAY

DRILLER: NHB

DRILLING METHOD: 6.25"HSA

DATE INSTALLED: 6/3/93

TOP OF RISER ELEV.: 224.89'

GROUND SURF. ELEV.: 223.20'

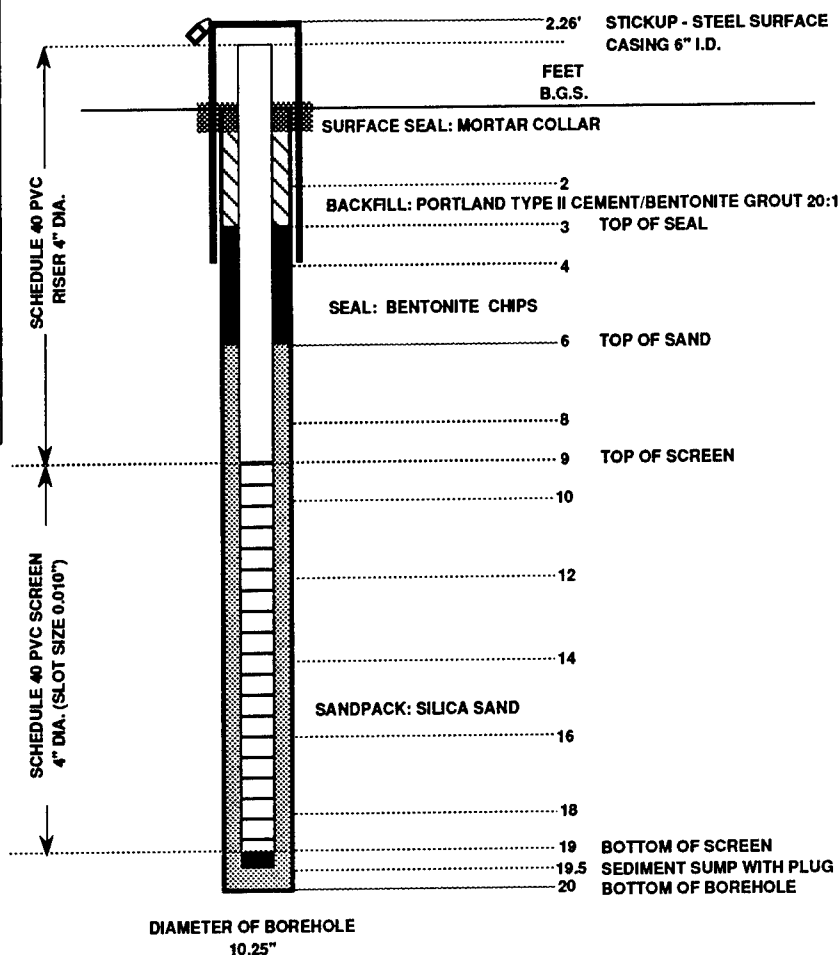




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: WWII FUEL POINT

BORING No.: G6M-94-15A

GEOLOGIST: R. RUSTAD

DRILLER: NHB

DRILLING METHOD: 6.25"HSA

DATE INSTALLED: 8/9/94

TOP OF RISER ELEV.: 253.67'

GROUND SURF. ELEV.: 251.50'

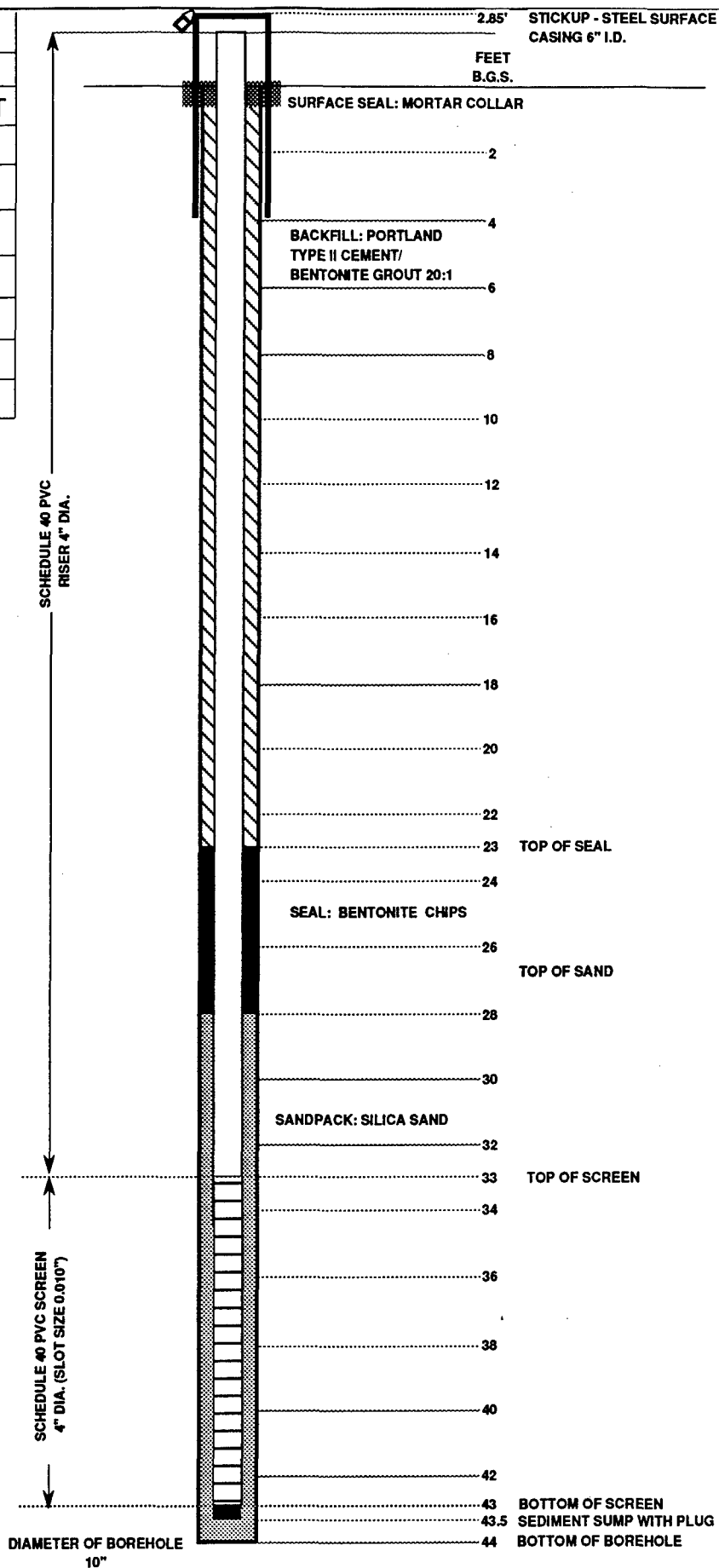




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-94-16X
GEOLOGIST: R. RUSTAD
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 8/11/94
TOP OF RISER ELEV.: 254.77'
GROUND SURF. ELEV.: 252.90'

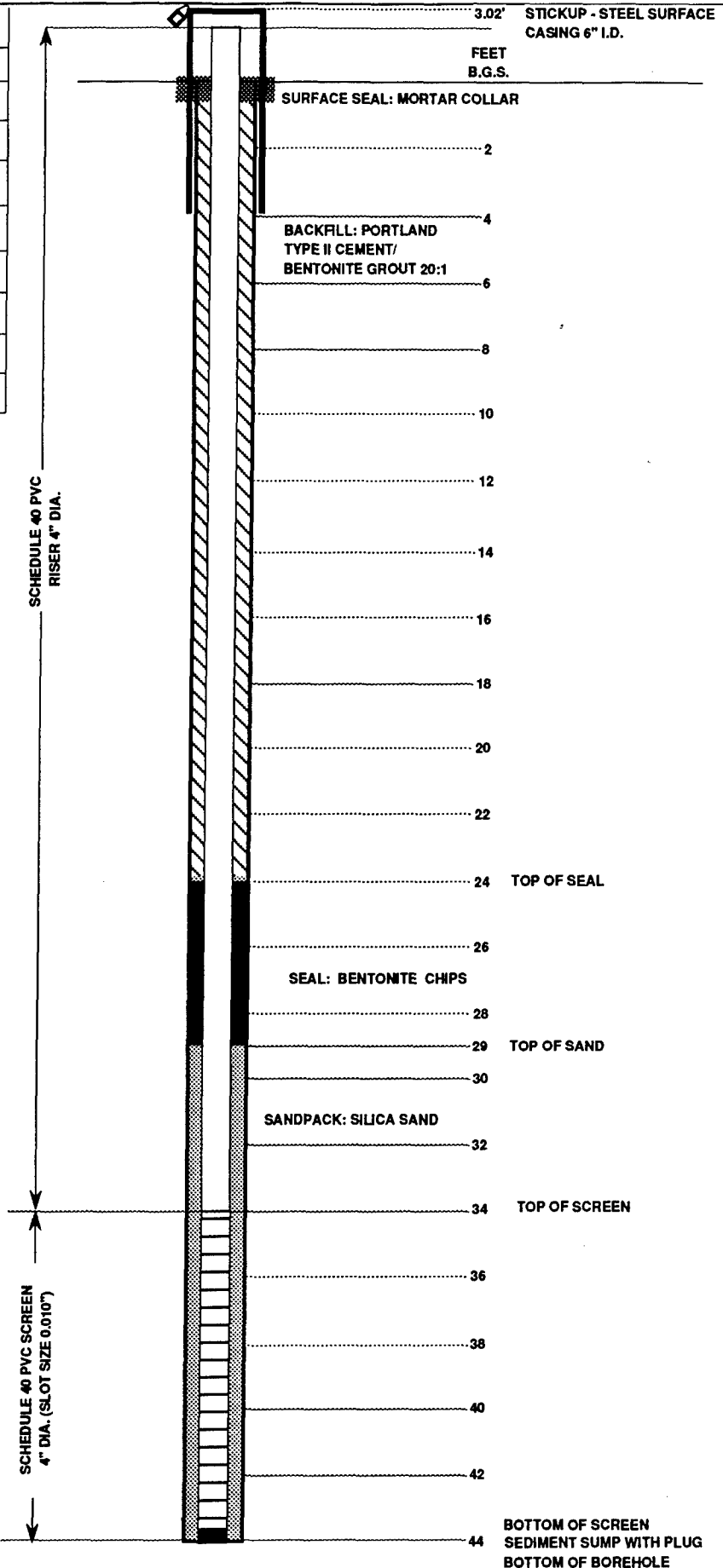




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-94-17A
GEOLOGIST: D. PIERCE
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 8/10/94
TOP OF RISER ELEV.: 256.17'
GROUND SURF. ELEV.: 253.00'

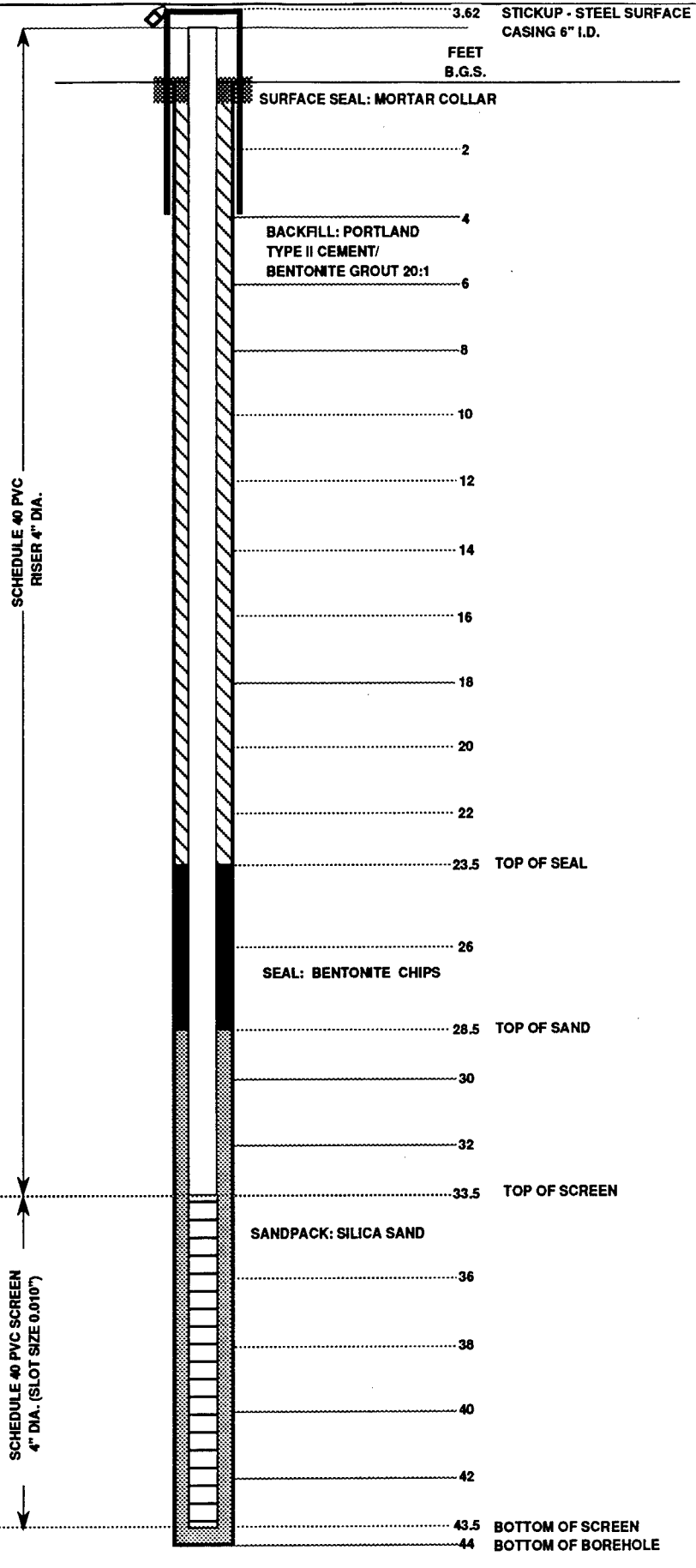




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: WWII FUEL POINT

BORING No.: G6M-94-18X

GEOLOGIST: R. RUSTAD

DRILLER: NHB

DRILLING METHOD: 4" D & W

DATE INSTALLED: 8/18/94

TOP OF RISER ELEV.: 225.78'

GROUND SURF. ELEV.: 223.60'

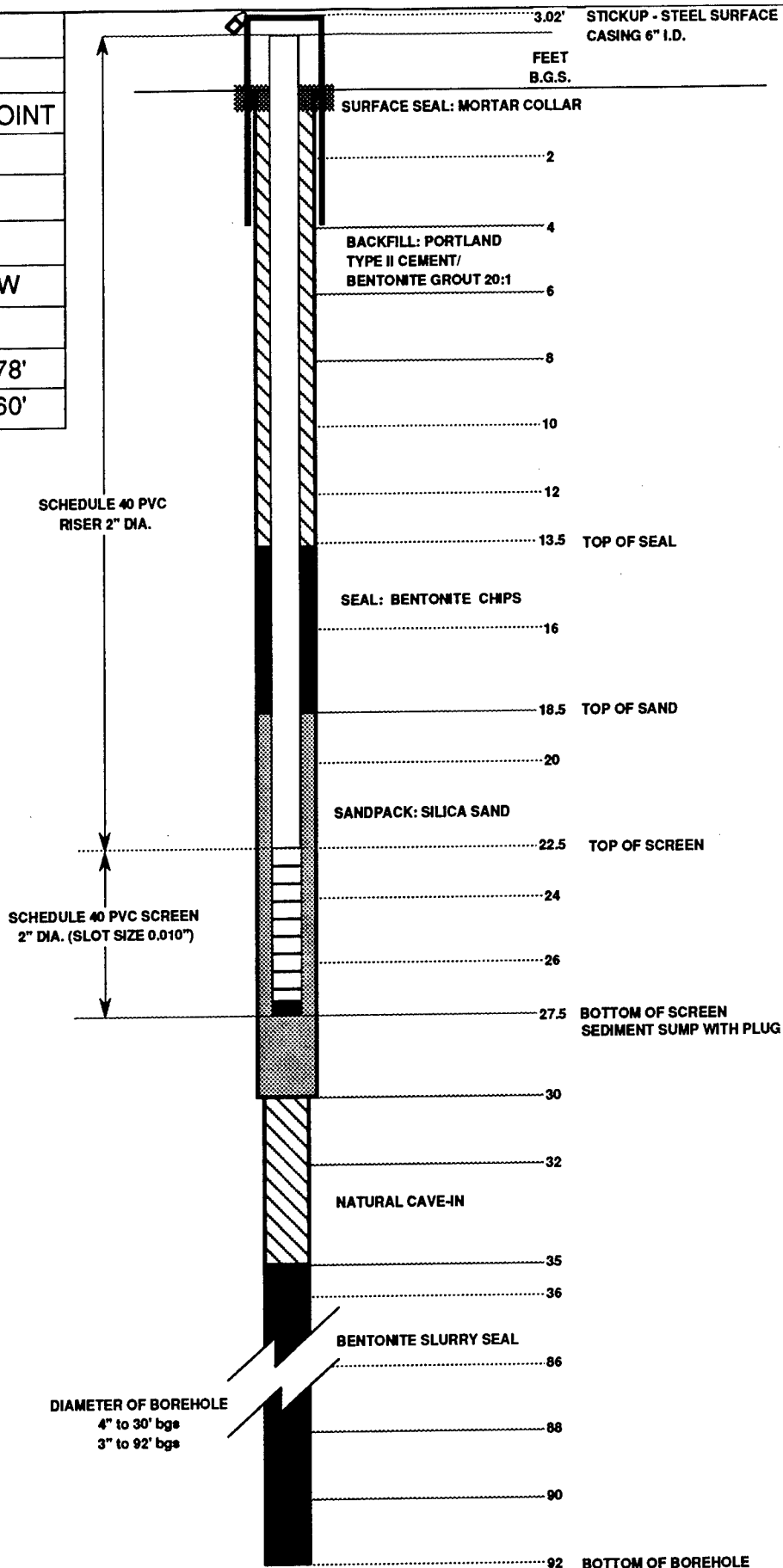




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-95-19X
GEOLOGIST: H. COLBY
DRILLER: NHB
DRILLING METHOD: 4" D & W
DATE INSTALLED: 1/25/95
TOP OF RISER ELEV.: 224.59'
GROUND SURF. ELEV.: 222.80'

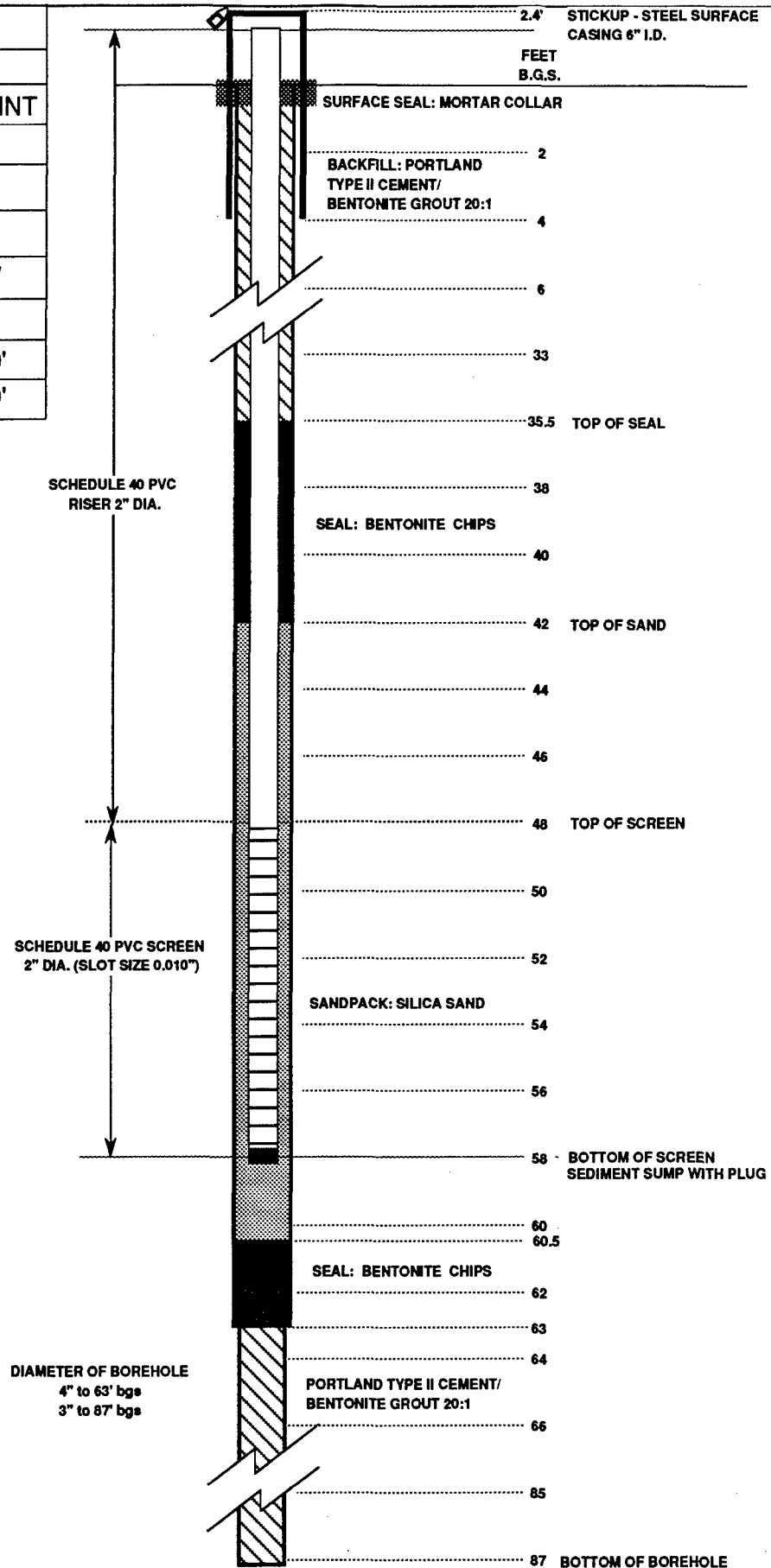
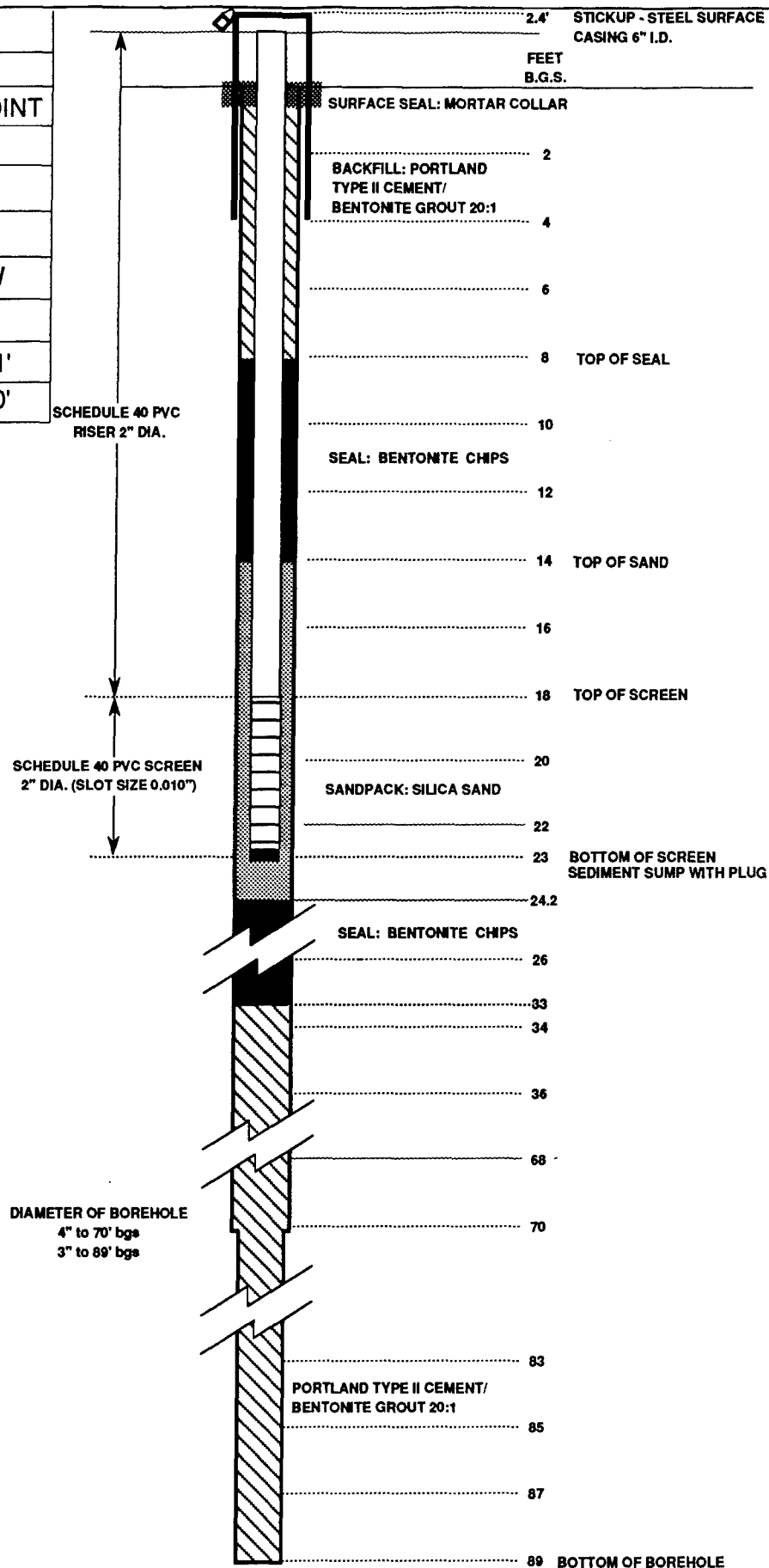




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-95-20X
GEOLOGIST: J. HEALEY
DRILLER: NHB
DRILLING METHOD: 4" D & W
DATE INSTALLED: 1/19/95
TOP OF RISER ELEV.: 225.31'
GROUND SURF. ELEV.: 223.00'



APPENDIX D

STREAM-FLOW CALCULATIONS AND DISCUSSIONS

STREAM-FLOW ESTIMATES

Stream-flow measurements were made in Cold Spring Brook on June 22, 1992 and in the Nashua River on June 24, 1992 (Figure D-1).

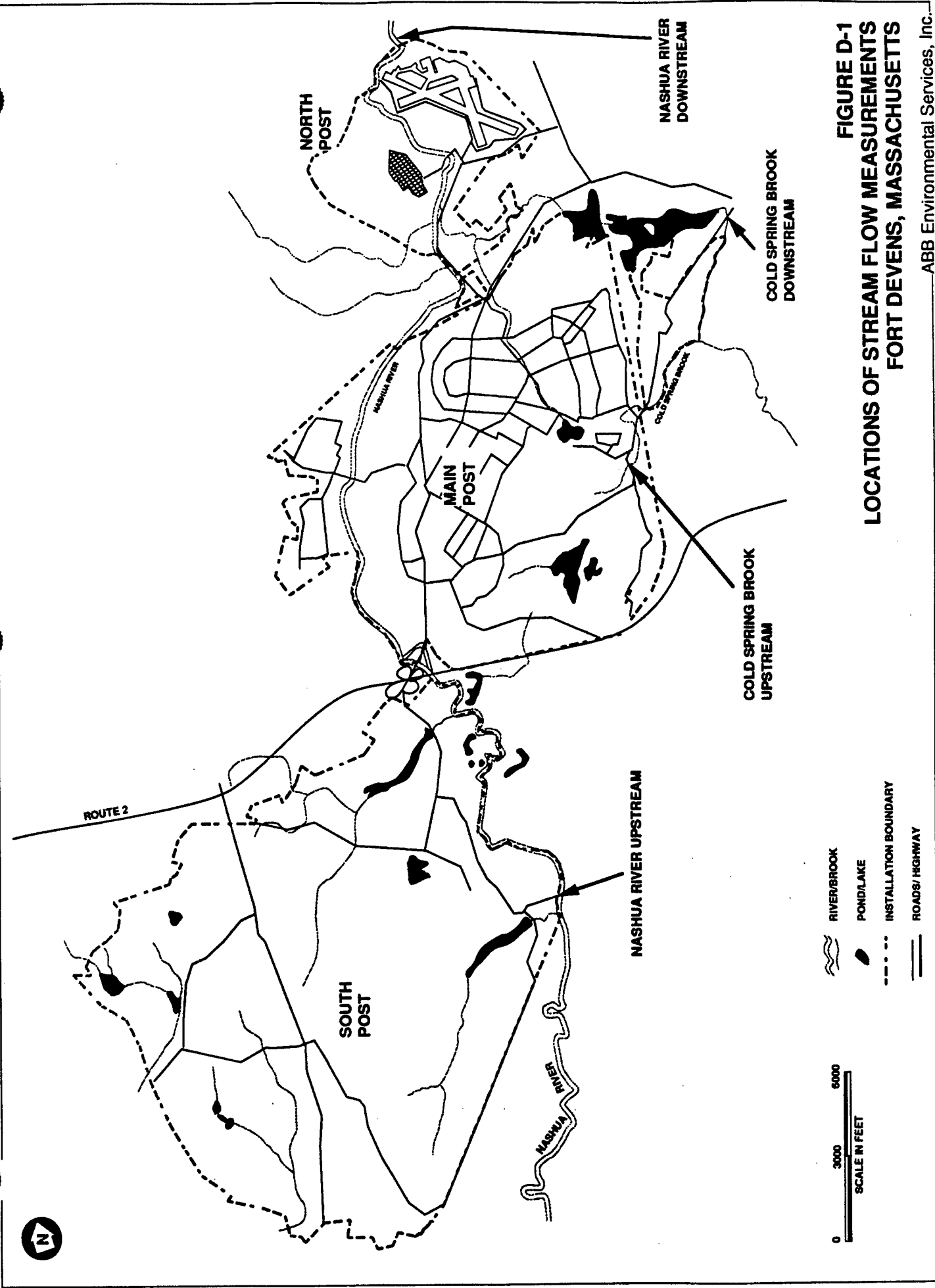
In Cold Spring Brook, the upstream measurement was made where the brook crosses beneath Patton Road (on the downstream side of the road). The culvert beneath Patton Road is the outlet from Cold Spring Brook Pond, and beavers regulate the pond level by plugging the culvert. Attempts to unplug the culvert were unsuccessful because of quick response actions by the beavers. However, it was observed that the pond level is generally stable, indicating that discharge from the pond is approximately equal to inflow to the pond. Stream flow was estimated based on field observations. The downstream measurement in Cold Spring Brook was made where the Brook flows under Barnum Road (on the downstream side of the Road), using a Montidore electronic velocity meter.

In the Nashua River, the measurements were made at the most upstream location on base (the bridge at Still River Gate on the South Post) and approximately 8 miles away at the most downstream location on base (the Route 2A bridge on the North Post). Because of the depth and current of the river, a Gurley current meter suspended from a cable was used to obtain velocity readings in each cross-section segment.

The calculated flows were as follows:

STREAM	FLOW AT UPSTREAM LOCATION (cfs)	FLOW AT DOWNSTREAM LOCATION (cfs)
Cold Spring Brook	0.02	0.13
Nashua River	101	109

ABB Environmental Services, Inc.





Inter-Office Correspondence

6917-04

TO: Ben Rice

FROM: Gary Shearer

DATE: July 8, 1992

SUBJECT: **FORT DEVENS STREAM GAGING**

Stream gaging of two streams at the Fort Devens site was conducted on June 22 and 24, 1992. The flow was measured in Cold Spring Brook at the Patten Road crossing (upstream) and at the Barnum Road crossing (downstream). The flow in the Nashua river was measured at the most upstream location at Fort Devens near the Village of Still River at Harvard Road and at the Route 2A crossing (downstream location).

Cold Spring Brook at Patten Road is ponded at the upstream side of road by a beaver dam at the culvert under the roadway. The discharge from the culvert, based upon field observations, was determined to be approximately 0.02 cfs or 9 gpm. While the culvert is plugged, the pond level is reportedly stable indicating the flow discharging from the culvert is representative of the inflow to the pond.

The flow in Cold Spring Brook at Barnum Road was determined to be 0.13 cfs based upon stream gaging measurements. A cross section was located approximately 8 feet downstream of the Barnum Road bridge and velocity readings were obtained using a Montidore electronic velocity meter. The velocity measurements and the cross sectional area of the stream were obtained to calculate the flow in the stream. The attached data sheets show the information obtained in the field and the flow calculations.

The depth of the water at the two Nashua River cross sections required the flow measurements to be obtained from the bridges. A Gurley current meter suspended by a cable from the bridge was used to obtain the velocity readings at each cross section. Each stream cross section was divided into segments and meter measurements were obtained at 0.2 and 0.8 depth at each segment. The meter readings were converted to velocities and recorded. The flows calculated in the Nashua River were 101 cfs at Harvard Road and 109 cfs at Route 2A. The attached data sheets show the field readings and the flow calculations for each site.

cc: J. Snowden

Attachment

Stream Flow Measurements

Cold Spring Brook

G. Shearer
M. Murphy

DATE: 6/22/92

TIME IN: 9:30

TIME OUT: 11:30

TRANSECT LOCATION: Cold Spring Brook

(Refer to site plan) *Barnum Rd xing*
Downstream Site

TOTAL CHANNEL WIDTH (ft.): 27'

TOTAL NO. SEGMENTS (M): 7

WIDTH/SEGMENT (w) (ft):

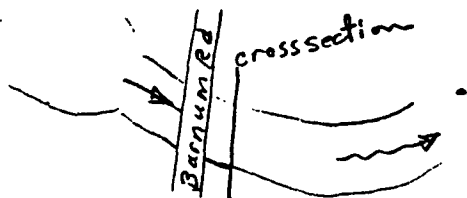
Mont. Fox Electronic Velocity Motor
Vel. Readings Based on 40 sec. avg.

STATION (m)	DEPTH d (ft)	AREA (ft ²)	$\frac{V}{0.2}$	$\frac{V}{0.8}$	MEAN VEL (v) (ft/s)	DISCH $q = wdv$	STATION (m)
0	0		0	0			
5	1.0	2.5	0	0	0	0	
10	1.1	5.25	0	0	0	0	
15	1.5	6.5	0	0	0	0	
18	1.5	4.5	0	0.01	0	0	
20	1.6	3.1	0.02	0.06	0.04	.06	
22	1.5	3.1	0	0	0	.06	
27	0	3.75	0	0	0	0	
					TOTAL =	0.13 cfs	

SKETCH OF CHANNEL SECTION:

m=0 (left bank facing upstream)

Section located 8' downstream of Barnum Rd Bridge



PG 1 of 3

Stream Flow Measurements

Nashua River
Rte 2A - Downstream Section

TOTAL CHANNEL WIDTH (ft): 90'
TOTAL NO. SEGMENTS (M): 9
WIDTH/SEGMENT (w) (ft): 10'

Section Taken @ Downstream
Side of Rt 2A Bridge

G. Shearer
A. Murphy

DATE: 6/24/92
TIME IN: 9 AM
TIME OUT: 10:30 AM
TRANSECT LOCATION:
(Refer to site plan)

Gurley Current Meter
Suspended from Bridge

STATION (m)	DEPTH d (ft)	AREA (ft ²)	VELOCITY 0.2d	0.8d	MEAN VEL (v) (ft/s)	DISCH q = wdv	STATION (m)
0	0		0	0			
10	3.7	18.5	0	0	0	0	
20	5.5	46	0.24	0	.12	2.8	
30	6.8	61.5	0.15	0.13	.14	8.0	
40	7.2	70	0.40	0.21	.30	15.4	
50	7.6	74	0.43	0.16	.30	22.2	
60	7.7	76.5	0.40	0.31	.35	24.9	
70	8.0	78.5	0.25	0.24	.25	23.6	
80	5.8	69	0.14	0	.07	11.0	
90	0	29	0	0	0	1.0	
						TOTAL = 108.9 cfs	

SKETCH OF CHANNEL SECTION:
m=0 (left bank facing upstream)

PG 2 of 3

Stream Flow Measurements

Nashua River

Upstream Section - Ft Devens Access Rd

TOTAL CHANNEL WIDTH (ft.): 67'

TOTAL NO. SEGMENTS (M): 8

WIDTH/SEGMENT (w) (ft):

Section Taken @ Downstream
Side of Bridge

G. Steorer
H. Murphy

DATE: 6/24/92

TIME IN: 12:30

TIME OUT: 2:00

TRANSECT LOCATION:

(Refer to site plan)

Gurley Current Meter.
Suspended from Bunge.

STATION (m)	DEPTH d (ft)	Area (ft) ²	VELOCITY		MEAN VEL (v) (ft/s)	DISCH q = wdv	STATION (m)
			0.2d	0.8d			
0	0		0	0	0		
10	4.7	23.5	0.24	0.18	0.21	2.5	
20	7.8	62.5	0.42	0.13	0.28	16.6	
30	9.8	88.0	0.47	0.40	0.44	31.7	
35	7.1	42.3	0.40	0.38	0.39	17.6	
40	5.4	31.3	0.19	0.32	0.26	10.2	
50	5.2	53.0	0.35	0.30	0.33	15.6	
60	3.0	41.0	0	0	0	6.8	
67	0	10.5	0	0	0	0	
					TOTAL = 101 cfs		

SKETCH OF CHANNEL SECTION:

m=0 (left bank facing upstream)

PG 3 of 3

PROJECT Cold Spring Brook Ft. Devens	COMP. BY GS	JOB NO. 6917-04
	CHK. BY	DATE 6/27/92

Location: Patten Road
upstream site

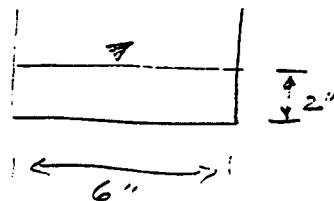
B. Shearer
H. Murphy

Estimated flow through culvert

Based on visual observation on 6/24/92

$$\text{velocity} = 0.25 \text{ ft/s}$$

Area =



$$\frac{3}{12} \times \frac{2}{12} = .0833 \text{ ft}^2$$

$$\text{flow} = 0.25 \times .0833 = .0208 \text{ cfs} \quad \text{or} \quad \frac{9 \text{ gallons}}{\text{minute}}$$

Upstream side of culvert blocked by beaver dam that controls the pond level and discharge through culvert. Pond level is apparently stable and therefore flow through culvert is representative of actual flow from drainage area.

APPENDIX E
PROJECT ANALYTE LIST/CRLS

APPENDIX E
PROJECT ANALYTE LIST / CERTIFIED REPORTING LIMITS
SITE INVESTIGATION REPORT
FORT DEVENS

TEST NAME	PARAMETER NAME	SOIL		WATER	
		CRL	UNIT	CRL	UNIT
PAL INORGANICS					
AL	ALUMINUM	2.35	ug/g	141	ug/l
SB	ANTIMONY	0.109	ug/g	3.03	ug/l
AS	ARSENIC	0.25	ug/g	2.54	ug/l
BA	BARIUM	5.18	ug/g	5	ug/l
BE	BERYLLIUM	0.5	ug/g	5	ug/l
CD	CADMIUM	0.7	ug/g	4.01	ug/l
CA	CALCIUM	100	ug/g	500	ug/l
CR	CHROMIUM	4.05	ug/g	6.02	ug/l
CO	COBALT	1.42	ug/g	25	ug/l
CU	COPPER	0.965	ug/g	8.09	ug/l
FE	IRON	3.68	ug/g	38.8	ug/l
PB	LEAD	0.177	ug/g	1.26	ug/l
MG	MAGNESIUM	100	ug/g	500	ug/l
MN	MANGANESE	2.05	ug/g	2.75	ug/l
HG	MERCURY	0.05	ug/g	0.243	ug/l
NI	NICKEL	1.71	ug/g	34.3	ug/l
K	POTASSIUM	100	ug/g	375	ug/l
SE	SELENIUM	0.25	ug/g	3.02	ug/l
AG	SILVER	0.589	ug/g	4.6	ug/l
NA	SODIUM	100	ug/g	500	ug/l
TL	THALLIUM	0.319	ug/g	6.99	ug/l
V	VANADIUM	3.39	ug/g	11	ug/l
ZN	ZINC	8.03	ug/g	21	ug/l

APPENDIX E
PROJECT ANALYTE LIST / CERTIFIED REPORTING LIMITS
SITE INVESTIGATION REPORT
FORT DEVENS

TEST NAME		PARAMETER NAME	SOIL		WATER	
			CRL	UNIT	CRL	UNIT
PAL EXPLOSIVES						
135TNB	1,3,5-TRINITROBENZENE		0.488	ug/g	0.449	ug/l
13DNB	1,3-DINITROBENZENE		0.496	ug/g	0.611	ug/l
246TNT	2,4,6-TRINITROTOLUENE		0.456	ug/g	0.635	ug/l
24DNT	2,4-DINITROTOLUENE		0.424	ug/g	0.0637	ug/l
26DNT	2,6-DINITROTOLUENE		0.524	ug/g	0.0738	ug/l
HMX	CYCLOTETRAMETHYLENETETRAMINE		0.666	ug/g	1.21	ug/l
NB	NITROBENZENE		2.41	ug/g	0.645	ug/l
RDX	CYCLONITE		0.587	ug/g	1.17	ug/l
TETRYL	NITRAMINE		0.731	ug/g	1.56	ug/l
NG	NITROGLYCERINE		4	ug/g	10	ug/l
PETN	PENTAERYTHRITOL TETRANITRATE		4	ug/g	20	ug/l
PAL ANIONS/CATIONS						
HCO3	BICARBONATE		NA		NA	ug/l
CL	CHLORIDE		NA		2,120	ug/l
SO4	SULFATE		NA		10,000	ug/l
NO3	NITRATE		NA		10	ug/l
CA	CALCIUM		NA		500	ug/l
K	POTASSIUM		NA		375	ug/l
MG	MAGNESIUM		NA		500	ug/l
PAL WATER QUALITY PARAMETERS						
CL	CHLORIDES		NA		2,120	ug/l
N2KJEL	TOTAL NITROGEN		NA		183	ug/l
NIT	NO3-N		NA		10	ug/l
SO4	SULFATES		NA		10,000	ug/l
TPO4	TOTAL PHOSPHORUS		NA		13.3	ug/l
--	HARDNESS		NA		NA	ug/l

APPENDIX E
PROJECT ANALYTE LIST / CERTIFIED REPORTING LIMITS
SITE INVESTIGATION REPORT
FORT DEVENS

TEST NAME	PARAMETER NAME	SOIL		WATER	
		CRL	UNIT	CRL	UNIT
ALK	ALKALINITY	NA		NA	ug/l
TSS	TOTAL SUSPENDED SOLIDS	NA		NA	ug/l
DO	DISSOLVED OXYGEN	NA		NA	ug/l
PAL ORGANICS					
VOLATILE COMPOUNDS					
111TCE	1,1,1 - TRICHLOROETHANE	0.0044	ug/g	0.5	ug/l
112TCE	1,1,2 - TRICHLOROETHANE	0.0054	ug/g	1.2	ug/l
11DCE	1,1 - DICHLOROETHYLENE / 1,1 - DICHLOROETHENE	0.0039	ug/g	0.5	ug/l
11DCE	1,1 - DICHLOROETHANE	0.0023	ug/g	0.68	ug/l
12DCE	1,2 - DICHLOROETHYLENES, TOTAL (CIS AND TRANS ISOMERS)	0.003	ug/g	0.5	ug/l
12DCE	1,2 - DICHLOROETHANE	0.0017	ug/g	0.5	ug/l
12DCLP	1,2 - DICHLOROPROPANE	0.0029	ug/g	0.5	ug/l
ACET	ACETONE	0.017	ug/g	13	ug/l
BRDCLM	BROMODICHLOROMETHANE	0.0029	ug/g	0.59	ug/l
C2H3CL	CHLOROETHENE / VINYL CHLORIDE	0.0062	ug/g	2.6	ug/l
C2H5CL	CHLOROETHANE	0.012	ug/g	1.9	ug/l
C6H6	BENZENE	0.0015	ug/g	0.5	ug/l
CCl4	CARBON TETRACHLORIDE	0.007	ug/g	0.5	ug/l
CH2Cl2	METHYLENE CHLORIDE	0.012	ug/g	2.3	ug/l
CH3BR	BROMOMETHANE	0.0057	ug/g	5.8	ug/l
CH3CL	CHLOROMETHANE	0.0088	ug/g	3.2	ug/l
CHBR3	BROMOFORM	0.0069	ug/g	2.6	ug/l
C13DCP	CIS-1,3-DICHLOROPROPYLENE C+S-1,3-DICHLOROPROPENE	0.0032	ug/g	0.58	ug/l
CHCl3	CHLOROFORM	0.00087	ug/g	0.5	ug/l

APPENDIX E
PROJECT ANALYTE LIST / CERTIFIED REPORTING LIMITS

SITE INVESTIGATION REPORT
FORT DEVENS

TEST NAME	PARAMETER NAME	SOIL		WATER	
		CRL	UNIT	CRL	UNIT
CL2CH2	DICHLOROMETHANE	12	ug/g	2.3	ug/l
CLC6H5	CHLOROBENZENE	0.00086	ug/g	0.5	ug/l
CS2	CARBON DISULFIDE	0.0044	ug/g	0.5	ug/l
DBRCLM	DIBROMOCHLOROMETHANE	0.0031	ug/g	0.67	ug/l
ETC6H5	ETHYLBENZENE	0.0017	ug/g	0.5	ug/l
MEC6H5	TOLUENE	0.00078	ug/g	0.5	ug/l
MEK	METHYLETHYL KETONE / 2-BUTANONE	0.07	ug/g	6.4	ug/l
MIBK	METHYLISOBUTYL KETONE	0.027	ug/g	3	ug/l
MNBK	METHYL-N-BUTYL KETONE / 2-HAXANONE	0.032	ug/g	3.6	ug/l
STYR	STYRENE	0.0026	ug/g	0.5	ug/l
T13DCP	TRANS-1,3-DICHLOROPROPENE	0.0028	ug/g	0.7	ug/l
TCLEA	1,1,2,2-TETRACHLOROETHANE	0.0024	ug/g	0.51	ug/l
TCLEE	TETRACHLOROETHYLENE / TETRACHLOROETHENE	0.00081	ug/g	1.6	ug/l
TRCLE	TRICHLOROETHYLENE / TRICHLOROETHENE	0.0028	ug/g	0.5	ug/l
TXYLEN	XYLENES, TOTAL COMBINED	1.5	ug/g	0.84	ug/l
PAL ORGANICS					
SEMIVOLATILE COMPOUNDS					
124TCB	1,2,4-TRICHLOROBENZENE	0.04	ug/g	1.8	ug/l
12DCLB	1,2-DICHLOROBENZENE	0.11	ug/g	1.7	ug/l
13DCLB	1,3-DICHLOROBENZENE	0.13	ug/g	1.7	ug/l
14DCLB	1,4-DICHLOROBENZENE	0.098	ug/g	1.7	ug/l
245TCP	2,4,5-TRICHLOROPHENOL	0.1	ug/g	5.2	ug/l
246TCP	2,4,6-TRICHLOROPHENOL	0.17	ug/g	13	ug/l
24DCLP	2,4-DICHLOROPHENOL	0.18	ug/g	2.9	ug/l
24DMPN	2,4-DIMETHYLPHENOL	0.69	ug/g	5.8	ug/l

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TEST NAME	PARAMETER NAME	SOIL		WATER	
		CRL	UNIT	CRL	UNIT
24DNP	2,4-DINITROPHENOL	1.2	ug/g	21	ug/l
24DNT	2,4-DINITROTOLUENE	0.14	ug/g	4.5	ug/l
26DNT	2,6-DINITROTOLUENE	0.085	ug/g	0.79	ug/l
2CLP	2-CHLOROPHENOL	0.06	ug/g	0.99	ug/l
2CNAP	2-CHLORONAPHTHALENE	0.036	ug/g	0.5	ug/l
2MNAP	2-METHYLNAPHTHALENE	0.049	ug/g	1.7	ug/l
2MP	2-METHYLPHENOL/2-CRESOL	0.029	ug/g	3.9	ug/l
2NANIL	2-NITROANILINE	0.062	ug/g	4.3	ug/l
2NP	2-NITROPHENOL	0.14	ug/g	3.7	ug/l
33DCBD	3,3'-DICHLOOROBENZIDINE	6.3	ug/g	12	ug/l
3NANIL	3-NITROANILINE	0.45	ug/g	4.9	ug/l
46DN2C	4,6-DINITRO-2-CRESOL/ METHYL-4,6-DINITROPHENOL	0.55	ug/g	17	ug/l
4BRPPE	4-BROMOPHENYLPHENYL ETHER	0.033	ug/g	4.2	ug/l
4CANIL	4-CHLOROANILINE	0.81	ug/g	7.3	ug/l
4CL3C	4-CHLORO-3-CRESOL/ 3-METHYL-4-CHLOROPHENOL	0.095	ug/g	4	ug/l
4CLPPE	4-CHLOROPHENYLPHENYL ETHER	0.033	ug/g	5.1	ug/l
4MP	4-METHYLPHENOL/4-CRESOL	0.24	ug/g	0.52	ug/l
4NANIL	4-NITROANILINE	0.41	ug/g	5.2	ug/l
4NP	4-NITROPHENOL	1.4	ug/g	12	ug/l
ANAPNE	ACENAPHTHENE	0.036	ug/g	1.7	ug/l
ANAPYL	ACENAPHTHYLENE	0.033	ug/g	0.5	ug/l
ANTRC	ANTHRACENE	0.033	ug/g	0.5	ug/l
B2CEXM	BIS(2-CHLOROETHOXY) METHANE	0.059	ug/g	1.5	ug/l
B2CIPE	BIS(2-CHLOROISOPROPYL) ETHER	0.2	ug/g	5.3	ug/l

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TEST NAME	PARAMETER NAME	SOIL		WATER	
		CRL	UNIT	CRL	UNIT
B2CLEE	BIS (2-CHLOROETHYL) ETHER / 2,2-OXYBIS(1-CHLOROPROPANE)	0.033	ug/g	1.9	ug/l
B2EHP	BIS (2-ETHYLHEXYL) PHTHALATE	0.62	ug/g	4.8	ug/l
BAANTR	BENZO [A] ANTHRACENE	0.17	ug/g	1.6	ug/l
BAPYR	BENZO [A] PYRENE	0.25	ug/g	4.7	ug/l
BBFANT	BENZO [B] FLUORANTHENE	0.21	ug/g	5.4	ug/l
BBZP	BUTYLBENZYL PHTHALATE	0.17	ug/g	3.4	ug/l
BGHPY	BENZO [G,H,I] PERYLENE	0.25	ug/g	6.1	ug/l
BKFANT	BENZO [K] FLUORANTHENE	0.066	ug/g	0.87	ug/l
BZALC	BENZYL ALCOHOL	0.19	ug/g	0.72	ug/l
CARBAZ	CARBAZOLE	No certified limit		No certified limit	
CHRY	CHRYSENE	0.12	ug/g	2.4	ug/l
CL6BZ	HEXACHLOROBENZENE	0.033	ug/g	1.6	ug/l
CL6CP	HEXACHLOROCYCLOPENTADIENE	6.2	ug/g	8.6	ug/l
CL6ET	HEXACHLOROETHANE	0.15	ug/g	1.5	ug/l
DBAHA	DIBENZ [A,H] ANTHRACENE	0.21	ug/g	6.5	ug/l
DBZFUR	DIBENZOFURAN	0.035	ug/g	1.7	ug/l
DEP	DIETHYL PHTHALATE	0.24	ug/g	2	ug/l
DMP	DIMETHYL PHTHALATE	0.17	ug/g	1.5	ug/l
DNBP	DI-N-BUTYL PHTHALATE	0.061	ug/g	3.7	ug/l
DNOP	DI-N-OCTYL PHTHALATE	0.19	ug/g	15	ug/l
FANT	FLUORANTHENE	0.068	ug/g	3.3	ug/l
FLRENE	FLUORENE	0.033	ug/g	3.7	ug/l
HCBD	HEXACHLOROBUTADIENE	0.23	ug/g	3.4	ug/l
ICDPYR	INDENO [1,2,3-C,D] PYRENE	0.29	ug/g	8.6	ug/l
ISOPHR	ISOPHORONE	0.033	ug/g	4.8	ug/l
NAP	NAPHTHALENE	0.037	ug/g	0.5	ug/l

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TEST NAME	PARAMETER NAME	SOIL		WATER	
		CRL	UNIT	CRL	UNIT
NB	NITROBEZENE	0.045	ug/g	0.5	ug/l
NNDNPA	N-NITROSO DI-N-PROPYLAMINE	0.2	ug/g	4.4	ug/l
NNDPA	N-NITROSO DIPHENYLAMINE	0.19	ug/g	3	ug/l
PCP	PENTACHLOROPHENOL	1.3	ug/g	18	ug/l
PHANTR	PHENANTHRENE	0.033	ug/g	0.5	ug/l
PHENOL	PHENOL	0.11	ug/g	9.2	ug/l
PYR	PYRENE	0.033	ug/g	2.8	ug/l
PAL ORGANICS					
PESTICIDES AND PCBS					
ABHC	ALPHA-BENZENEHEXACHLORIDE/ ALPHA-HEXACHLOROCYCLOHEXANE	0.00907	ug/g	0.0385	ug/l
ACLDAN	ALPHA CHLORDANE	0.005	ug/g	0.075	ug/l
AENSLF	ALPHA-ENDOSULFAN/ENDOSULFAN I	0.00602	ug/g	0.023	ug/l
ALDRN	ALDRIN	0.00729	ug/g	0.0918	ug/l
BBHC	BETA-BENZENEHEXACHLORIDE/ BETA-HEXACHLOROCYCLOHEXANE	0.00257	ug/g	0.024	ug/l
BENSLF	BETA-ENDOSULFAN/ENDOSULFAN II	0.00663	ug/g	0.023	ug/l
DBHC	DELTA-BENZENEHEXACHLORIDE/ DELTA-HEXACHLOROCYCLOHEXANE	0.00555	ug/g	0.0293	ug/l
DLDNR	DIELDRIN	0.00629	ug/g	0.024	ug/l
ENDRN	ENDRIN	0.00657	ug/g	0.0238	ug/l
ENDRNA	ENDRIN ALDEHYDE	0.024	ug/g	0.0285	ug/l
ENDRNK	ENDRIN KETONE	Not certified		Not certified	
ESFSO4	ENDOSULFAN SULFATE	0.00763	ug/g	0.0786	ug/l
GCILDAN	GAMMA-CHLORDANE	0.005	ug/g	0.075	ug/l
HPCL	HEPTACHLOR	0.00618	ug/g	0.0423	ug/l
HPCLE	HEPTACHLOR EPOXIDE	0.0062	ug/g	0.0245	ug/l

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TEST NAME	PARAMETER NAME	SOIL		WATER	
		CRL	UNIT	CRL	UNIT
LIN	LINDANE/ GAMA-BENZENE/HEXACHLORIDE/ GAMMA-HEXACHLOROCYCLOHEXANE	0.00638	ug/g	0.0507	ug/l
MEXCLR	METHOXYCHLOR	0.0711	ug/g	0.057	ug/l
PCB016	PCB 1016	0.0666	ug/g	0.16	ug/l
PCB221	PCB 1221	0.0666	ug/g	0.16	ug/l
PCB232	PCB 1232	0.0666	ug/g	0.16	ug/l
PCB242	PCB 1242	0.0804	ug/g	0.19	ug/l
PCB248	PCB 1248	0.0804	ug/g	0.19	ug/l
PCB254	PCB 1254	0.0804	ug/g	0.19	ug/l
PCB260	PCB 1260	0.0804	ug/g	0.19	ug/l
PPDDD	2,2-BIS(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHANE	0.00826	ug/g	0.0233	ug/l
PPDDE	2,2-BIS(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHENE	0.00765	ug/g	0.027	ug/l
PPDDT	2,2-BIS(PARA-CHLOROPHENYL)- 1,1,1-TRICHLOROETHANE	0.00707	ug/g	0.034	ug/l
TXPHEN	TOXAPHENE	0.444	ug/g	1.35	ug/l

NOTES: CRL = CERTIFIED REPORTING LIMIT
NA= NOT APPLICABLE

APPENDIX F
DATA QUALITY REPORT

1.0 QUALITY CONTROL BLANK RESULTS

1.1 INTRODUCTION

This data quality report provides an evaluation of method blank and field quality control sample data generated for the Site Investigation (SI) activities conducted at Fort Devens Army Base, Ayer, Massachusetts. Data were generated by ESE Laboratories from the soil and water samples collected from May 1992 through July 1992. All data used in this report came directly off AEC's IRDMIS system. Samples originated only from study areas within SA Groups 3, 5, 6. Evaluations are discussed in this section on a per group basis.

Quality Control Frequency Tables

Frequency tables were generated for all quality control blanks that were analyzed during the Groups 3, 5, 6 portion of the Fort Devens Site Investigation. These include trip blanks, rinsate blanks and method blanks. The tables present results by analytical method and were used to identify any target analytes that appeared in blanks. The rate at which these analytes were found with respect to the total number of blanks, and the concentration range reported, are the key components of the frequency tables. Analytes which are not listed on the tables were not detected at a concentration above the Certified Reporting Limit (CRL).

The frequency tables are arranged by QC type (method blanks, rinsate blanks, trip blanks, and by the site group to which they are associated. An exception to this regime are the method blanks. Method blanks are not associated to an individual site group. Because of this, all method blanks from SA Groups 3, 5, 6 are lumped together. Method blank data includes analyses that were made in association with samples collected during SI activities at Fort Devens, prior to and including August 13. The method blank data may overlap with concurrent investigations at Group 2 and 7 sites. August 13 was the date selected as the cutoff for date of analysis since this is two weeks after the last sample was collected at SA Groups 3, 5, 6. Two weeks was selected since this was the maximum holding time allowed for VOC analysis. A general analysis which evaluates trends throughout the analytical period covering SA Groups 3, 5, 6 is presented for method blanks in Section 1.2.

1.2 METHOD BLANKS

Method blanks were analyzed to determine if compound analytes were introduced during the processing of the field samples. Chemically pure deionized water was used to collect method blanks at the laboratory. The blanks were run as if they were actual field samples using all the analytical methods. Any compounds that are detected are a result of contamination at the laboratory, since the water used in the analyses is contaminant free.

Since method blanks were done at the laboratory, there was no easy way to assign individual blanks to a specific group. Therefore, this discussion addresses method blank contamination issues globally for all of SA Groups 3,5,6. Table F-1 is a presentation of all compounds detected above CRL values in the SA Groups 3,5,6 method blanks and the frequency at which they were found.

Method blanks were analyzed for the following parameters: inorganics (soil and water), SVOCs (soil and water), VOCs (soil and water), explosives (soil and water), pesticides/PCBs (water only), nitrate/nitrite as nitrogen, total Kjeldahl nitrogen, chloride/sulfate ion (water only), total phosphates (water only), alkalinity (water only), carbonate ion (water only), hardness (water only), TOC (water and soil), TSS (water only) and TPHC (water and soil).

Inorganics

Soil method blanks for inorganics involve the use of AEC approved soil that is run as an ordinary field sample. The soil that is used is called a Tampa Bay soil. It is supposed to be free of contamination. The soil, in fact, is not free of contamination of inorganics. There are high background levels of many elements. Table F-1 shows that Aluminum, Barium, Calcium, Chromium, Copper, Iron, Potassium, Magnesium, Manganese, Sodium, Nickel, Lead, V and Zinc were found in Group 3,5,6 method blanks. These elements were found in varying frequencies. Aluminum, Calcium, Copper, Iron, Potassium, Magnesium, Manganese, Sodium, Lead, V and Zinc were found in every method blank that was completed. Table F-1 also lists concentrations at which elements were found. The reported concentrations represent background levels present in the Tampa Bay soil. The data does not represent contamination introduced at the laboratory.

The only inorganic elements detected in the water method blank analysis were lead, iron and potassium. Lead was detected in four of 12 method blanks at concentrations ranging from 1.6 $\mu\text{g/L}$ to 1.8 $\mu\text{g/L}$. Iron was found in two of 12 method blanks at 143 $\mu\text{g/L}$.

Potassium was also detected in two of 12 method blanks at 578 $\mu\text{g/L}$. The presence of these elements in water method blanks indicates introduction during the analytical process. The concentrations of these elements in actual samples may be biased high due to additional amounts introduced at the laboratory.

SVOCs

AEC methods LM18 and UM18 were used to analyze method blanks in soil and water, respectively. Toluene and bis (2-ethylhexyl) phthalate were reported in the SVOC soil blanks. Toluene was detected in two of two soil blanks at 0.2 $\mu\text{g/g}$. Bis (2-ethylhexyl) phthalate was detected in two of 26 soil blanks at 1.1 $\mu\text{g/g}$. Both compounds are listed in the USEPA SOW as common laboratory contaminants. These contaminants, when detected in sample results at similar concentrations, are probably representative of laboratory contamination. Other SVOC compounds detected in the method blanks were 1,2-Epoxy cyclohexene, mesityl oxide and several unknown compounds. These non-target compounds should also be considered as contaminants when seen in sample data at similar concentrations.

Bis (2-ethylhexyl) phthalate was also detected in two of 26 SVOC water blanks. The concentration at which it was found was 6.6 $\mu\text{g/L}$. 1,2-Epoxy cyclohexene, mesityl oxide and one unknown compound were also detected in these blanks.

VOCs

AEC methods LM19 and UM20 were used to analyze soil and water method blanks for VOCs. Acetone, trichlorofluoromethane, chloroform and one unknown compound were detected in the soil method blanks. The frequency and concentration at which they were found are presented in Table F-1. Acetone and chloroform are defined as common laboratory contaminants in the USEPA SOW. Trichlorofluoromethane, although not included in this list is also frequently used as a solvent in laboratories. These compounds can be considered as laboratory introductions when observed in similar concentrations to those in the method blank data.

1,1,1-Trichloroethane, toluene and chloroform were reported in the water method blanks. Toluene and chloroform, as stated previously, are common laboratory contaminants. Their presence in similar concentrations as sample results should be attributed to this introduction

rather than site contamination. The presence of 1,1,1-trichloroethane has also been attributed to laboratory contamination per conversations with ESE Laboratory personnel. The problem has been persistent for several months. Laboratory personnel are investigating the cause of this contamination.

Explosives

There were no explosive compounds detected above CRL in any of the SA Groups 3, 5, and 6 method blanks.

Pesticides/PCBs

There were no pesticide or PCB compounds detected in any of the SA Groups 3, 5, and 6 method blanks.

Other Methods

There was no contamination in SA Groups 3, 5, and 6 method blanks involving the following methodologies: nitrate/nitrite as nitrogen, chloride/sulfate ion, total Kjeldahl nitrogen, total phosphates, carbonate ion, hardness and TOC. TPHC contamination was observed in 14 of 22 soil method blanks. Concentrations of ranged from 4 to 31.2 $\mu\text{g/g}$. The soil TPHC method blank results should be considered upon encountering similar values for this parameter in the sample data. Method blanks that were tested for TSS and alkalinity also showed evidence of contamination. TSS was present in four of 20 method blanks at 4000 $\mu\text{g/L}$ to 4500 $\mu\text{g/L}$. Alkalinity detections were observed in two of ten method blanks at 5000 $\mu\text{g/L}$.

1.3 FIELD QUALITY CONTROL

1.3.1 Group 3 Field Quality Control Blanks

Data from quality control blanks have been summarized for SA Group 3. Rinsate results are summarized in Table F-2. Trip blank results are summarized in Table F-3. Method blank results are presented in Table F-1.

Inorganics

Several elements considered to be target analytes were detected in the rinsate samples associated with Group 3. Elements detected include barium, iron, lead, manganese and potassium.

Lead was detected in two of the six rinsate blanks. Concentrations of 9.44 $\mu\text{g/L}$ and 14.6 $\mu\text{g/L}$ were reported for these two samples. Both values are considerably higher than Certified Reporting Limit of 1.25 $\mu\text{g/L}$. A review of method blank data revealed only two of 12 samples contaminated with lead at concentrations of 1.6 $\mu\text{g/L}$ and 1.8 $\mu\text{g/L}$. Analysis of the source water, used in the decontamination process, shows an average value of 3.2 $\mu\text{g/L}$ of lead detected using the same method. These results suggest that low concentrations of lead were present in the source water. The potential for cross contamination of low concentrations of lead also existed based on rinsate results.

Iron and potassium were found at a frequency of four out of six rinsates. The range of iron concentrations found in the blanks was from 48.2 $\mu\text{g/L}$ to 148 $\mu\text{g/L}$. Iron was detected in two of twelve method blanks at 143 $\mu\text{g/L}$. Potassium was found at concentrations of 504 $\mu\text{g/L}$ to 995 $\mu\text{g/L}$. This compares to a 578 $\mu\text{g/L}$ method blank result. Source water results for both iron and potassium show both to be present at mean concentrations of 187 $\mu\text{g/L}$ and 1,090 $\mu\text{g/L}$, respectively. These elements are common components of groundwater, and their presence is most likely due to occurrence in the source water aquifer.

SVOCs

None of the SVOC target compounds were detected above the CRL using Method UM18. Three unknown compounds were found in concentrations from 4 $\mu\text{g/L}$ to 70 $\mu\text{g/L}$.

VOCs

Only three target VOCs were detected in the rinsate blanks. These compounds were methylene chloride, 1,1,1-trichloroethane, and chloroform. One unknown compound was found at 20 $\mu\text{g/L}$. Of the target analytes, methylene chloride, was found in the highest concentration at 10 $\mu\text{g/L}$. Although this compound is considered to be a common laboratory contaminant, no detectable levels were found in the method blanks. The most

commonly found VOC contaminant was 1,1,1-trichloroethylene which was detected in seven of eight rinsate blanks.

Trip blanks sent to the laboratory were analyzed for VOCs using method UM20. The only target compound detected in Group 3 trip blanks was methylene chloride. From the trip blank frequency table (Table F-3) methylene chloride is shown to be present in four of six trip blanks at 2.64 $\mu\text{g/L}$ to 4.7 $\mu\text{g/L}$. The CRL for methylene chloride is 2.30 $\mu\text{g/L}$. Methylene chloride is commonly introduced as a laboratory contaminant, although it is conspicuously absent above the CRL in any SA Group 3, 5, 6 method blanks. The absence of other VOCs in the trip blanks indicates that cross contamination of compounds by VOCs did not occur during shipment and storage of the samples.

1.3.2 Group 5 Field Quality Control Blanks

Data from quality control blanks have been summarized for Group 5 in the attached tables. Rinsate results are summarized in Table F-4. Trip blank results are summarized in Table F-5. Method blank results are presented in Table F-1.

Inorganics

A total of eight elements were detected in the rinsate blanks associated with SA Group 5. These metals were calcium, copper, iron, potassium, magnesium, manganese, sodium and zinc. All elements were found at a frequency of one in two rinsate blanks. These elements are commonly found at background concentrations in natural soils. All detected elements were found in the blank identified as SBK92111.

The other elements present in the rinsate blank are also found in every soil method blank analyzed. These elements are background concentrations of the Tampa Bay soil used in soil method blanks. They also can be found in the source water results at concentrations similar to those found in the rinsate blank. This indicates that the metals contamination in the rinsate blank could be the result of laboratory contamination and/or could be representative of background concentration carried over from the source water or equipment used to collect the samples.

SVOCs

No SVOC target compounds were found in the SA Group 5 rinsate blanks.

VOCs

None of the VOC target compounds were found in the SA Group 5 rinsate blanks. One target VOC, methylene chloride was found in the SA Group 5 trip blanks. This contaminant could have been introduced by the laboratory, however its absence in method blanks make this determination inconclusive. The absence of other VOC's in the trip blanks indicates that cross contamination did not occur in the samples.

Other Analytes

Nitrogen as nitrate and nitrite was found in the rinsate blank at 320 $\mu\text{g/L}$. It was not detected in any of the method blanks. An average concentration of 670 $\mu\text{g/L}$ was found in the source water. Alkalinity and carbonate values in the rinsate do not compare with source water results indicating introduction during the decontamination or rinsate blank collection processes. This concentration compares with an average value of 21,000 $\mu\text{g/L}$ found in the source water. All parameters were present in the rinsate blank identified as SBK92111.

1.3.3 Group 6 Field Quality Control Blanks

Data from quality control blanks have been summarized for Group 6 in the attached tables. Rinsate results are summarized in Table F-6. Trip blank results are summarized in Table F-7. Method blank results are presented in Table F-1.

Metals

Two target metals were found in one of two rinsates analyzed under AEC method SS10. These two metals are iron and manganese. Iron was found at 85.5 $\mu\text{g/L}$ and manganese at 3.2 $\mu\text{g/L}$. These analytes may have been introduced as laboratory contaminants, or from the source water, since much higher concentrations are present in all the method blanks and source water. Lead was found in one rinsate at 8.68 $\mu\text{g/L}$. Lead was also reported in the

field blank at a low concentration and is likely present due to occurrence in the source water.

SVOCs

None of the target SVOCs were detected above the CRL for any rinsate blanks.

VOCs

Three target VOCs were detected in Group 6 rinsates. They include 1,1,1-trichloroethane, toluene and chloroform. These compounds were found in one of two rinsate blanks. All three were found in method blanks at varying frequencies. Chloroform was most commonly found in these blanks. Chloroform is a common laboratory contaminant, and is routinely present in municipal water supplies. It was detected in 16 of 36 method blanks. Since all three VOCs are present in the method blanks at similar concentrations to those in the rinsates it is possible that they are present due to introduction during processing at the laboratory.

Methylene chloride was the only compound detected in the trip blank. It was found in one of the four trip blanks sent to the laboratory. The absence of other VOCs indicates that cross contamination probably did not occur.

1.3.4 Groundwater Field Quality Control Blanks

Three rounds of groundwater sampling of SA Groups 3, 5, and 6 monitoring wells were completed during Fort Devens Site Investigation. Round 1 groundwater sampling was completed in the summer of 1992. Round 2 groundwater sampling was completed during the fall of 1992. Round 3 was completed in the winter of 1993.

Field quality control samples, including rinsate and trip blanks, were collected in conjunction with these samples. Trip blanks were analyzed for VOCs to determine if cross contamination occurred during shipment and storage. Rinsate blanks from Rounds 1 and 2 were analyzed for inorganics, SVOCs, VOCs, explosives, pesticides/PCBs, nitrate/nitrite as nitrogen, total phosphates, alkalinity, TPHC, total Kjeldahl nitrogen, TSS and hardness. Rinsate blanks from Round 3 were analyzed for VOCs only.

Inorganics

Several elements were detected in rinsate blanks from the groundwater sampling efforts. These include barium, copper, iron, potassium, manganese, lead and zinc. The only one of these elements found in method blanks using the same methods was lead. Barium was detected in two of 11 rinsates from Round 1 water sampling. The concentrations of barium in these samples ranged from 7.21 $\mu\text{g/L}$ to 11.1 $\mu\text{g/L}$. There was no barium detected above CRL in Round 2 water sampling.

Copper was detected in one rinsate sample from Round 1. The concentration of copper was 20.1 $\mu\text{g/L}$. There were no copper concentrations above CRL in any of the three Round 2 rinsates.

There were detectable levels of iron in seven of 11 Round 1 rinsate samples. Concentrations ranged from 48.2 $\mu\text{g/L}$ to 150 $\mu\text{g/L}$. There was no iron reported above CRL in Round 2 rinsate data.

Potassium was reported above CRL in four of 11 rinsates in Round 1 rinsate samples and in all three Round 2 rinsate samples. Concentrations ranged from 504 $\mu\text{g/L}$ to 1100 $\mu\text{g/L}$ in these samples.

Manganese was reported above CRL in two of 11 Round 1 rinsate blanks and in two of three Round 2 rinsates. Concentrations ranged from 3.3 $\mu\text{g/L}$ to 5.3 $\mu\text{g/L}$.

Lead was reported in two of 11 rinsates from Round 1 and in none of the three Round 2 rinsates. The concentrations of the detected lead were 9.4 $\mu\text{g/L}$ and 14.6 $\mu\text{g/L}$. Lead was detected in method blanks for SA Groups 3, 5, and 6 but in concentrations of only roughly 1 to 2 $\mu\text{g/L}$.

Zinc was detected in two of 11 Round 1 rinsates and in two of three Round 2 rinsates. Concentrations ranged from 25.8 $\mu\text{g/L}$ to 181 $\mu\text{g/L}$.

None of these elements, with the exception of lead, were detected in method blank samples for SA Groups 3, 5, and 6. Introduction may have come from the sampling equipment which was decontaminated with AEC approved source water that has high background levels of all of these elements.

SVOCs

There were no SVOC compounds detected in any of the rinsate blanks from any of the rounds of groundwater sampling.

VOCs

Rinsate and trip blank samples from all three rounds of groundwater sampling were analyzed for VOCs. Compounds that were detected in the rinsates include chloroform, toluene and 1,1,1-Trichloroethane. Chloroform was measured in three rinsates at concentrations of 2.4 $\mu\text{g/L}$ to 2.8 $\mu\text{g/L}$. Toluene was measured in three rinsates at concentrations ranging from 0.51 $\mu\text{g/L}$ to 0.74 $\mu\text{g/L}$. Toluene and chloroform are both found in the method blanks as well. Both of these compounds are defined as common laboratory contaminants in the USEPA SOW. 1,1,1-Trichloroethane was found to be present in four rinsate samples at 1.5 $\mu\text{g/L}$ to 2.8 $\mu\text{g/L}$. There was also 1,1,1-Trichloroethane present in the method blanks indicating laboratory introduction. ESE Laboratories personnel have said that there has been a problem with contamination of this compound at their facility for the past several months. The source of its introduction is not known by their personnel, although they are investigating the problem to determine what may be done about it. Similar concentrations of 1,1,1-Trichloroethane in sample results may be attributable to laboratory introduction.

The only VOCs found in the trip blanks were chloroform and 1,1,1-Trichloroethane. As stated previously, these compounds have been identified as laboratory contaminants in the data. The trip blanks results indicate that no cross contamination of VOCs occurred in the shipment or storage of the samples.

Explosives

There were no explosive compounds detected in any of the rinsate samples.

Pesticides/PCBs

There were no pesticide or PCB compounds detected in any of the rinsate samples.

Other Methods

Rinsate blanks collected during the groundwater sampling efforts were also analyzed using the following methodologies: nitrate/nitrite as nitrogen, total phosphates, alkalinity, TPHC, total Kjeldahl nitrogen, TSS and hardness. Detectable concentrations of the following parameters were found in the rinsates: nitrate/nitrite as nitrogen, bicarbonate ion, alkalinity, total Kjeldahl nitrogen and hardness. These compounds were found at concentrations at or less than concentrations measured in the source water used to decontaminate the sampling equipment. This is a possible source of their presence in these samples.

2.0 MATRIX SPIKES AND DUPLICATE QUALITY CONTROL

2.1 INTRODUCTION

Matrix Spikes

Matrix spike and matrix spike duplicate samples were collected at a rate of one each per 20 environmental samples. The purpose of collecting these samples was to measure the effect of the matrix on the recovery of known concentrations of target analytes. A summary of matrix spike data is presented for each group (see Tables F-8, F-10, F-12). Data have been segregated by group and method to show recovery trends of particular analytes from each study area. In the tables matrix spikes have been paired with the corresponding matrix spike duplicates to make recovery comparisons. The relative percent differences (RPD) between recoveries of the matrix spikes and the matrix spike duplicates have been calculated and are listed next to the percent recovery. The relative percent difference is used to measure the analytical precision of the results. The average recoveries, and maximum and minimum recoveries for each method are also included as a way of measuring trends.

The criteria used for interpreting MS/MSD data are the analytical USEPA CLP protocols and the POP for Fort Devens Vol III. Interpretations of the MS/MSD results for each group are contained in Sections 2.2, 2.4, and 2.6 of the Appendix and in Sections 4.3.2, 5.3.2, and 6.5.2 of the SI report.

Duplicates

Field duplicate samples were collected at the same rate as the MS/MSD samples. Duplicates are differentiated from samples in the identification code. The second digit in the code will have a "D" in place to denote the duplicate. The duplicate code is identical to the conjugate sample code except for this digit.

The purpose of collecting duplicate samples was to measure the precision of the sampling and of the analytical results. The method by which this is measured is through the calculation of the RPD for each sample/duplicate pair. The RPD is the difference of the results divided by the average of them. The smaller the RPD the more closely the results agree. The more closely the results agree the greater the consistency shown by the

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laboratory for a particular method. The RPD has been calculated for each pair of samples/duplicates. They are presented with the balance of the duplicate data by group in Tables F-9, F-11, and F-13. Interpretations of duplicate data are presented in Sections 2.3, 2.5, and 2.7 of this Appendix and in Sections 4.3.3, 5.3.3, and 6.5.3 of the SI report.

A review of the duplicate data for SA Groups 3, 5, and 6 is presented with the MS/MSD review. The review is written for each group separately.

2.2 GROUP 3 MATRIX SPIKES

Matrix spike data for Group 3 has been reviewed and are presented in Table F-8. A total of five soil samples and associated duplicates were collected from study areas within the group. MS/MSD analyses were performed for inorganics.

Inorganics

Matrix spike analysis included the following elements for Group 3: selenium, lead, arsenic, thallium, antimony, silver, beryllium, cadmium, chromium, copper, nickel, zinc, and mercury. The recovery control limits of spiked inorganics are 25 percent +/- of 100 percent under CLP requirements. The CLP requirements are identical to those specified in the ABB-ES Fort Devens POP, Vol III. A total of 86 analyses were completed for inorganic matrix spikes. With the exception of six matrix spike analyses, all recoveries for inorganics fell within quality control limits. Five recovery values exceeded the CLP upper limit (125 percent). One value was below the CLP lower limit (75 percent).

The six recoveries which fell outside control limits occurred in lead soil (AEC Method JD17) and arsenic soil (AEC Method JD19) analyses. BX440310 and BX440410 and their associated duplicates accounted for all six. Sample BX440310 had recoveries of 132 percent and 129 percent for lead and 210 percent and 97 percent for arsenic. Concentrations of 8.54 $\mu\text{g/g}$ for arsenic, and 3.81 $\mu\text{g/g}$ for lead, were reported in the original unspiked run of the sample. This is consistent with background concentrations in soils for these elements found in Section 3.5 of the SI report text. Concentrations of lead and arsenic in the original sample may be responsible for high matrix spike recoveries for BX440410.

In general the recoveries for the Group 3 matrix spikes/matrix spike duplicates were within CLP limits. The data reflect little matrix interference in the recovery of inorganic analytes.

2.3 GROUP 3 DUPLICATES

One water sample and two soil samples were collected from Group 3 for duplicate analysis. The water sample is identified as MXG30300. The two soil samples are BX440605 and BX520605. Duplicate data for Group 3 are presented in Table F-9. BX440605, BX520605 and their respective duplicates were analyzed for the following soil methodologies: inorganics (AEC Methods JB01, JD15, JD17, JD19, JD24, JD25, JS16), SVOCs (AEC Method LM18), VOCs (AEC Method LM19) and TPHC. The water sample, MXG303X1, and the duplicate were analyzed for the following: inorganics (AEC Methods SB01, SD09, SD20, SD21, SD22, SD28 and SS10), SVOCs (AEC Method UM18), VOCs (AEC Method UM20), nitrate/nitrite as nitrogen (AEC Method TF22), chloride/sulfate ions (AEC Method TT10), TPHC, TSS, alkalinity and bicarbonate ion.

USEPA Region I guidelines were used to assess the RPDs of inorganics, SVOCs and VOCs. These guidelines provide criteria as to whether there is good precision of the results.

Inorganics

The following elements are included in the inorganics duplicate review for both soil samples and the water sample from Group 3: mercury (AEC Methods JB01, SB01), selenium (AEC Methods JD15, SD21), lead (AEC Methods JD17, SD20), arsenic (AEC Methods JD19, SD22), thallium (AEC Method JD24, SD09), antimony (AEC Method JD25, SD28) and silver, aluminum, barium, beryllium, calcium, cadmium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, sodium, nickel, vanadium, zinc (AEC Method JS16, SS10).

The USEPA Region I criteria for the RPD of inorganic methods is 50 percent for soils and 30 percent for waters. The following elements were detected in the soil samples BX440605 and BX520605: arsenic, aluminum, barium, calcium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, sodium, nickel, lead, vanadium, and zinc. Beryllium was detected in BX520605 and BD520605 but was not found in either of the sample/duplicate pair of BX440605. The RPDs for all elements of both sample/duplicate pairs were all below the USEPA 50 percent limit. The highest RPD reported was for that of lead in the

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sample/duplicate pair of BX520605 (25.5 percent). There was good reproducibility of the results shown for the soil inorganic methods.

MXG303X1 was used for the inorganic water analyses. The following elements were detected in this sample and its duplicate: aluminum, barium, calcium, iron, potassium, magnesium, manganese, sodium, and lead. The RPDs for the following elements were above the 30 percent USEPA criteria: aluminum (73.3 percent), barium (68.3 percent), calcium (51 percent), iron (51 percent), potassium (105 percent) and manganese (163 percent). All of these elements are analyzed using AEC Method SS10. MXG303X1 inorganic waters were run in lot ZZE.

SVOCs

AEC Method LM18 was used to detect SVOC compounds in BX440605, BX520605 and their respective duplicates. The method also tested for PCB compounds and pesticides in these soil samples. The following SVOC compounds were reported above CRL in the soil sample BX440605: 1-Methylnaphthalene, 2-Methylnaphthalene, dodecane, tridecane, tetradecane, pentadecane, hexadecane, heptadecane, fluorene, naphthalene, dibenzofuran and phenanthrene. The RPD for nine out of these 12 pairs of samples was 0 percent. The highest RPD of the SVOC compounds was 40 percent for phenanthrene. All RPDs were below the USEPA Region I limit of 50 percent for soil organics. In general there was good reproducibility of the results of this sample.

The following SVOC compounds were found in at least one of the sample pair BX520605: anthracene, benzo(a)anthracene, benzo(k)fluoranthene, chrysene, fluoranthene, phenanthrene, and pyrene. The RPDs for the following compounds do not satisfy the USEPA CLP condition for organics in soils of RPD <50 percent: benzo(a)anthracene (68.7 percent), fluoranthene (139.8 percent), phenanthrene (154 percent) and pyrene (143 percent). The results for many of these compounds do not show agreement. Many compounds were present in detectable concentrations in one sample but were non-detect in the duplicate. The high sorption coefficients for these polyaromatic hydrocarbons may be responsible for the lack of agreement found in the SVOC concentrations for this duplicate set. By looking at Table F-9 it can be seen that there are many high RPD values for compounds which are non-detect. The CRL values do not agree because there was a dilution performed at the laboratory. This results in the differing CRL values and the resulting high RPDs.

None of the SVOC compounds were found above the CRL in WXG303X1 or the duplicate.

VOCs

AEC methods LM19 and UM20 were used to determine the precision of measuring VOCs in soil and water, respectively. BX440605, BX520605, MXG303X1 and their associated duplicates were used for the analyses. VOCs were not detected in BX520605 or its duplicate. There was, however, evidence of VOC contamination in BX440605. Ethylbenzene, toluene and xylene were reported in either this sample or the duplicate. The RPDs between the sample and duplicate for these compounds are as follows: ethylbenzene (193.7 percent), toluene (170 percent) and xylene (196 percent). The results show inconsistency for the method by the laboratory or a lack of homogeneity of VOCs in the sample.

None of the VOCs were found in the water sample MXG303X1 or the duplicate.

Other Methods

Duplicate samples were collected from Group 3 and analyzed using other methods. These include the following: nitrate/nitrite as nitrogen (AEC Method TF22), chloride/sulfate ions (AEC Method TT10), TPHC, TSS, alkalinity and bicarbonate ion. All of the above analyses were performed on the water sample MXG303X1. Soil samples BX440605, BX520605 and their respective duplicates were tested for TPHC only. There are no USEPA CLP criteria to use as guidance in assessing the precision for these methods.

Nitrate/nitrite as nitrogen results for MXG303X1 are 1800 $\mu\text{g/L}$ and 1400 $\mu\text{g/L}$. The RPD of these results is 25 percent.

Chloride ion was found in both samples of the MXG303X1 sample/duplicate pair. The values reported for these samples are 21200 $\mu\text{g/L}$ and 16600 $\mu\text{g/L}$. The RPD of these concentrations was calculated to be 24.3 percent. Sulfate ion was not detected above the CRL of 10000 $\mu\text{g/L}$ in either of the sample pair.

TPHC analyses were completed on two soil and one water sample pairs collected from Group 3. Excellent precision was shown for both the soil and water methods. The RPDs

of the two soil sample pairs were 4.9 percent for BX440605 and 18.4 percent for BX520605. Both TPHC concentrations for MXG303X1 were below the CRL of 200 $\mu\text{g/L}$.

The TSS results for MXG303X1 and its duplicate were both below the CRL of 4000 $\mu\text{g/L}$.

Alkalinity results for MXG303X1 are 230000 $\mu\text{g/L}$ and 24000 $\mu\text{g/L}$. The RPD for these results was determined to be 162.5 percent. The difference in these values could reflect field variability in the collection of the samples. The RPD is high enough to cast doubt on the reproducibility of alkalinity concentrations for this group.

Bicarbonate ion results for MXG303X1 and the duplicate are 281000 $\mu\text{g/L}$ and 29300 $\mu\text{g/L}$. The RPD for the values was reported at 162.2 percent. Because of the close association of bicarbonate ion to alkalinity, concentrations of each would be expected to be in relative proportions to one another. The differences between the samples and duplicates are about the same for both the bicarbonate and alkalinity methods. Because these differences are consistent for both methods, field variability is a likely cause for the high RPDs. This should be taken into consideration during the Group 3 review of alkalinity/bicarbonate ion data.

2.4 GROUP 5 MATRIX SPIKES

The matrix spike data from Group 5 have been reviewed and are presented in Table F-10. Group 5 water samples were spiked and analyzed for the following: inorganics, explosives, nitrate/nitrite as nitrogen, total Kjeldahl nitrogen, total phosphates, chloride/sulfate ion, alkalinity and hardness. Group 5 soil samples were spiked and analyzed for inorganics and explosives. USEPA CLP advisory limits and requirements specified in the Fort Devens POP, Volume III were used to evaluate the recoveries for applicable methods. The following assessment summarizes the effect of the Group 5 sample matrices on the recoveries of known spike concentrations.

Inorganics

The following elements were included in the Group 5 inorganic matrix spike review for both soil and water samples: mercury (AEC methods JB01, SB01), selenium (AEC methods JD15, SD21), lead (AEC methods JD17, SD20), arsenic (AEC methods JD19, SD22), thallium (AEC methods JD24, SD09), antimony (AEC methods JD25, SD28) and silver,

aluminum, barium, beryllium, calcium, cadmium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, sodium, nickel, vanadium, zinc (AEC methods JS16, SS10).

A total of nine water samples and two rinsate blanks were spiked and analyzed using the various inorganic water methods. Not all nine samples were tested for all elements. Table F-10 summarizes the samples that go with the various methodologies.

The USEPA CLP advisory limit for the recoveries of inorganics is 100 percent \pm 25 percent. The recoveries of all of the elements analyzed by the inorganic water methods met this criteria with the exception of thallium, aluminum, chromium, and iron. The thallium recoveries of all water samples except WYG509XX and its duplicate were above the USEPA limit. The average recovery for all samples run in three different lots was 134.2 percent. Thallium was not detected in any method blanks or Group 5 rinsate blanks. Group 5 water sample results for thallium may be biased high given the recoveries obtained in the MS/MSD analysis.

Very low recoveries for aluminum were observed in two of four pairs of MS/MSDs. These samples are MDMW13X1, MXMW07X1 and the associated duplicates. Aluminum recoveries for MDMW13X1 were 46.7 percent and 7.1 percent. Aluminum recoveries for MXMW07X1 and the duplicate were both 7.1 percent. The recoveries for these samples do not meet the USEPA CLP criteria. The low recovery values may be due to matrix effects of the water samples. Sample results for MXMW13X1 and MXMW07X1 may be biased low based on the matrix spike recovery data. Two other MS/MSD sample pairs tested for aluminum had recoveries that fell within USEPA advisory limits.

Of the four MS/MSD water sample pairs submitted for chromium analysis under method SS10 only one pair had spike recoveries that did not fall within USEPA guidelines. The sample was identified as MXMW07X1. Recoveries for this sample were 65.5 percent and 59.5 percent. Chromium concentrations for MXMW07X1 could be biased low based on these recoveries. The average chromium recovery for all Group 5 samples was 86.6 percent.

Iron recoveries for two of four MS/MSD water sample pairs were well below the lower USEPA recovery limit of 75 percent. All four recoveries were 3.9 percent. The sample pairs identified with these low iron recoveries are MDMW13X1 and MXMW07X1. The sample concentrations of iron for MDMW13X1 and MXMW07X1 may be biased low because of these matrix effects.

The MS/MSD soil recoveries for all elements except lead, copper and zinc were within USEPA advisory limits. All Group 5 soil samples analyzed under method JD17 for lead had recoveries that far exceeded the upper USEPA advisory limit. Samples that were spiked with lead that showed these elevated recoveries were DDG50500 and EX090104. Lead recoveries for DDG50500 were 730.1 percent and 307.2 percent. Lead was not detected in any method blanks or in any of the Group 5 rinsate blanks. However, concentrations of lead were measured at 73 $\mu\text{g/g}$ in the unspiked sample of DDG50500 and at 89 $\mu\text{g/g}$ in EX090104.

Both pairs of MS/MSD samples were spiked at about 5.0 $\mu\text{g/g}$. Large concentrations of lead in the sample could have skewed the recoveries high since the spiking concentration relative to the sample concentration is low. There also was little agreement in the results. RPDS for the MS/MSDs were 81.5 percent and 122 percent. Lead concentrations may be biased high in light of the MS/MSD results.

Only one MS/MSD soil sample, EX090104, was analyzed using method JS16. The only elements for the method for which USEPA recovery criteria were not met were copper and zinc. Only one copper recovery of the MS/MSD sample pair was over the USEPA limit. This recovery was 160.7 percent. The average recovery for the two samples was 138.2 percent. Both zinc recoveries were below the USEPA lower limit of 75 percent. Recoveries were reported at 50.5 percent and 44.6 percent. The low recoveries could be due to matrix effects of the soil. Zinc results for EX090104 and possibly other samples could be biased low because of these effects.

Explosives

There are no USEPA CLP guidelines governing the recoveries of explosive compounds. However, the protocol followed was that specified in the Fort Devens POP, Volume III Section A.6. The specification for explosive compound recoveries as stated in this document is that they must fall within 25 percent of the mean recovery for daily control spikes. Two water samples were collected from Group 5 for MS/MSD analysis of explosive compounds. The recoveries of all explosive compounds met this stipulation with the exception of 1,3,5-trinitrobenzene. The recoveries of one sample pair out of two were below the minimum recovery needed to meet the criteria. The sample was identified as WYG507XX. Recoveries for these samples were 45.3 percent and 44.4 percent. The other sample pair, MXMW08X1, had 1,3,5-trinitrobenzene recoveries of 82.9 percent and 78.9 percent. These recoveries are within the acceptable recovery range for this compound.

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2.5 GROUP 5 DUPLICATES

Duplicate water and soil samples were collected from Group 5 study areas. The sample/duplicate results were used to measure sampling and analytical precision. Group 5 water samples and duplicates were analyzed for the following methodologies: inorganics, SVOCs, VOCs, explosives, nitrate/nitrite as nitrogen, total Kjeldahl nitrogen, total phosphates, chloride/sulfate ions, alkalinity, hardness, bicarbonate ion, TPHC and TSS. Group 5 duplicate soil samples were analyzed for the following: inorganics, SVOCs, VOCs, explosives and TPHC. Group 5 duplicate data is summarized in Table F-11.

USEPA Region I protocols were used to assess the RPDs of inorganics, SVOCs and VOCs. The protocols provided criteria to determine whether there was good precision of the data.

Inorganics

The following elements were included in both the soil and water methods used in Group 5 duplicate analyses: mercury (AEC methods JB01, SB01), selenium (AEC methods JD15, SD21), lead (AEC methods JD17, SD20), arsenic (AEC methods JD19, SD22), thallium (AEC methods JD24, SD09), antimony (AEC methods JD25, SD28) and silver, aluminum, barium, beryllium, calcium, cadmium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, sodium, nickel, vanadium, zinc (AEC methods JS16, SS10).

Inorganic duplicate soil samples collected from Group 5 were SX210100, WXG50500 and EX090208. The USEPA Region I criteria for the RPD of duplicates for inorganic soils is 50 percent. The RPDs between samples and duplicates for most of the elements included in the inorganic soil methods were below this level. The RPD between results was greater than 50 percent (107.8 percent in SX210100), antimony (94.2 percent in EX090208), cadmium (70.1 percent in SX210100 and 80.9 percent in EX090208), potassium (59.9 percent in EX090208), manganese (54 percent in SX210100) and sodium (84.7 percent in WXG50500).

There is a significant difference in the results of the arsenic test for SX210100. Concentrations for the samples were reported at 8.99 $\mu\text{g/g}$ and 30 $\mu\text{g/g}$. A lack of homogeneous arsenic concentrations may explain for the disparity in the concentrations.

The 94.2 percent RPD calculated for antimony results in EX090208 exceeds the 50 percent USEPA CLP limit because the numbers are small enough that even a small difference between them could result in a high RPD calculation. Concentrations were reported at $3.03 \mu\text{g/g}$ and $< 1.090 \mu\text{g/g}$. These are low levels of contamination for this element.

Cadmium concentrations of $1.510 \mu\text{g/g}$ and $3.12 \mu\text{g/g}$ were reported for SX210100. The cadmium concentrations of EX090208 were reported at $1.659 \mu\text{g/g}$ and $< 0.700 \mu\text{g/g}$. The RPDs of these results are high for the same reasons explained in the discussion for antimony. The reported concentrations represent low level cadmium contamination for these samples and represent good agreement.

The RPD of manganese results for SX210100 exceeds the USEPA CLP limit by 4 percent. The precision shown in the detection of this element could be more of a reflection of the lack of even dispersal of manganese throughout the samples.

The RPD of sodium results for DXG50500 is 84.7 percent. The concentration in one of the sample pair was reported at $< 100 \mu\text{g/g}$. Conversely, a concentration of $247 \mu\text{g/g}$ was detected in the duplicate. These results indicate enough of a difference to show inconsistency for the detection of this element.

MXMW13X1, WXG507XX and their associated duplicates were the Group 5 water samples analyzed for inorganics. The USEPA CLP guideline for the RPD between inorganic duplicate samples is 30 percent. The RPDs for the results of the duplicate pair of WXG507XX were all less than this 30 percent limit for all elements. The RPDs for the results of the duplicate pair of MXMW13X1 exceeded this limit in the analysis of the following elements: mercury (137.4 percent), lead (83 percent), arsenic (81.2 percent), aluminum (154.6 percent), barium (94.1 percent), chromium (72.5 percent), magnesium (111 percent) and manganese (97 percent). These results do not demonstrate good precision for the methods used for the detection of these elements.

SVOCs

AEC method LM18 was used to measure SVOCs in Group 5 soil samples. SX210100, DXG50500, EX090208 and their respective duplicates were used to determine if there was good agreement between the results. SVOC compounds were not reported above the respective CRLs for SX210100 and EX090208. The following SVOC compounds were found to be present in the sample/duplicate pair of DXG50500: fluoranthene, phenanthrene,

pyrene and several unknowns. The RPD for these results was greater than the USEPA CLP guideline of 50 percent for all of these compounds except phenanthrene for which the RPD was 47.6 percent. RPDs of 65 percent each were calculated for the fluoranthene and pyrene results. The results of six unknown compounds were reported for the sample pair of DXG50500. The range of RPDs, all of which exceeded the 50 percent USEPA limit, was from 65.2 percent to 163.2 percent.

AEC method UM18 was used to measure SVOC concentrations in Group 5 water samples. Two pairs of water samples from the group were used in this analysis; MXMW13X1, WXG507XX and their respective duplicates. The only compound detected above CRL in either sample pair was N,N-Diethyl-3-methylbenzamide. This compound was detected in both samples of WXG507XX. The concentrations were reported at 70 $\mu\text{g/L}$ and 80 $\mu\text{g/L}$. The RPD of these results is 13.3 percent. This is well below the USEPA limit of 30 percent for organic water RPDs.

VOCs

AEC method LM19 was used to measure VOC concentration in Group 5 soil samples. Two sets of samples/duplicates were used in the method; DXG50500 and EX090208. There were no VOC compounds found in either of the EX090208 samples. The only VOC reported above CRL in the DXG50500 duplicate pair was acetone. Acetone was detected in both the sample and duplicate at 80 $\mu\text{g/g}$ and 70 $\mu\text{g/g}$. As stated previously, acetone is a common laboratory contaminant. Although none was found using this method in method blanks, the probable cause of its presence is introduction at the laboratory. The RPD of these results was determined to be 10.8 percent. This is well below the USEPA CLP limit of 30 percent.

AEC method UM20 was used for VOC in water analysis. One sample/duplicate pair was used in this analysis; DXG50700. None of the VOCs were measured above CRL in this sample.

Explosives

AEC method LW12 was used to measure explosives in soils. One soil sample and duplicate were collected. This sample was identified as DXG50500. No explosive compounds were detected in either sample using this method.

AEC method UW32 was used to measure explosive compound concentrations in Group 5 water samples. Water samples submitted for this analysis were MXMW13X1, WXG507XX and their respective duplicates. None of the explosive compounds were found above CRL in any of the water samples analyzed.

Other Methods

Several other methods were used to determine sampling and analytical precision for Group 5 water and soil samples. There were no USEPA CLP guidelines available to measure the precision of the results. Professional judgment was used to determine whether there was good agreement between the sample and duplicate results.

One method that was used in the duplicate analysis of soil samples from Group 5 was TPHC. Three soil sample/duplicate pairs were collected for this analysis. These are SX210100, DXG50500 and EX090208. Petroleum contamination was found to be present in all six samples. The RPDs between sample and duplicate results were 12.9 percent for SX210100, 57.8 percent for DXG50500 and 1.9 percent for EX090208. The highest concentrations found in this set of samples were 5300 $\mu\text{g/g}$ and 5200 $\mu\text{g/g}$ reported for EX090208 and the duplicate, respectively.

Methods that were used in the duplicate analysis of water samples from Group 5 were nitrate/nitrite as nitrogen (AEC method TF22), total Kjeldahl nitrogen (AEC method TF26), total phosphates (AEC method TF27), chloride/sulfate ions (AEC method TT10), alkalinity, hardness, bicarbonate ion, TPHC and TSS.

MXMW13X1, WXG507XX and the corresponding duplicates were used for nitrate/nitrite as nitrogen in water analysis. Nitrogen compounds were detected in all four of these samples. Concentrations were reported at 40.4 $\mu\text{g/L}$ and 66.8 $\mu\text{g/L}$ for the MXMW13X1 sample pair. The RPD of these results is 49.3 percent. Concentrations of 860 $\mu\text{g/L}$ and 910 $\mu\text{g/L}$ were reported for the WXG507XX sample pair. The RPD for these results is 5.6 percent. Overall there was good reproducibility of the nitrogen results for these two pairs of water samples using this method.

MXMW13X1, WXG507XX and their duplicates were used also for total Kjeldahl nitrogen analysis. There was no nitrogen detected above CRL for MXMW13X1 and MDMW13X1. Concentrations of 1140 $\mu\text{g/L}$ and 952 $\mu\text{g/L}$ were measured in WXG507XX and

WDG507XX, respectively. The RPD of the WYG507XX results is 18 percent. The total Kjeldahl nitrogen concentrations agree between samples and the corresponding duplicates.

MXMW13X1, WYG507XX and their duplicates were also used for total phosphate measurements. Phosphates were found to be present in all four samples. Concentrations were measured at 248 $\mu\text{g/L}$ and 99 $\mu\text{g/L}$ for MXMW13X1 samples. The RPD of these results is 85.9 percent. This represents a significant difference in the values. The concentrations of phosphate in WYG507XX samples were 139 $\mu\text{g/L}$ and 148 $\mu\text{g/L}$. The RPD of these results is only 6.3 percent.

Chloride and sulfate ion concentrations were determined for MXMW13X1, WYG507XX and their respective duplicates. The RPD of the chloride results was 2.3 percent in MXMW13X1 and 0 percent in WYG507XX. The RPD of the sulfate results was 0 percent for MXMW13X1 and 0.8 percent for WYG507XX. There is excellent precision shown for the method in the detection of both ion concentrations.

Alkalinity analysis was completed on MXMW13X1 and WYG507XX. RPDs were calculated at 33.3 percent and 12.1 percent respectively for these samples. These RPDs represent good reproduction of the values for this parameter.

MXMW13X1, WYG507XX and the respective duplicates were used to determine agreement in hardness concentrations. The RPDs were 20 percent and 0 percent respectively for these sample pairs. The RPD values indicate good agreement in the results.

MXMW13X1 and its duplicate were analyzed for bicarbonate concentrations. Concentrations of 17100 $\mu\text{g/L}$ and 12200 $\mu\text{g/L}$ were obtained for these samples. The RPD was determined to be 33.4 percent.

The water samples MXMW13X1, WYG507XX and their corresponding duplicates were analyzed for TPHC concentrations. TPHC levels were below the CRL of 200 $\mu\text{g/L}$ for all four samples indicating that there was no petroleum contamination.

MXMW13X1, WYG507XX and their associated duplicates were collected and analyzed for TSS concentrations. The RPD was computed to be 147.6 percent for the MXMW13X1 pair and 83.3 percent for the WYG507XX set. The high RPD values for the results indicate a high degree of variability for the results.

2.6 GROUP 6 MATRIX SPIKES

The matrix spike data from Group 6 have been reviewed and are presented in Table F-12. Group 6 water and soil samples were spiked and analyzed for inorganics. USEPA CLP requirements and requirements specified in the Fort Devens POP were used to evaluate the recoveries of the applicable methods. Recovery values were used to assess the matrix effects manifested in Group 6 samples.

Inorganics

The following elements are included in the various methods used in the matrix spike analysis of inorganics for Group 6 soil and water samples: mercury (AEC methods JB01, SB01), Se (AEC methods JD15, SD21), lead (AEC methods JD17, SD20), arsenic (AEC methods JD19, SD22), thallium (AEC methods JD24, SD09), antimony (AEC methods JD25, SD28) and silver, aluminum, barium, beryllium, calcium, cadmium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, sodium, nickel, vanadium, zinc (AEC methods JS16, SS10).

A total of ten Group 6 soil samples were spiked and analyzed using the various inorganic methods. Not all ten samples were tested for all elements. Refer to Table F-12 to see which samples were analyzed for particular methods.

The USEPA CLP advisory limits for inorganic recoveries is 100 percent \pm 25 percent. The recoveries were within this range for all elements except arsenic, selenium, lead and antimony. Five MS/MSD soil samples were collected and analyzed for arsenic concentrations. These samples are BX310308, BX 310560, BXG60200, BXG60325 and DXG60400. The arsenic recoveries for three soil samples were not within the USEPA advisory limits. These samples are identified as BX310308, BX310560 and BXG60200. Arsenic recoveries for BX310308 were 110.7 percent and 61 percent. The concentration of arsenic in the unspiked sample of BX310308 was 7.02 $\mu\text{g/g}$. This represents a background level for the element that may have influenced the percent recovery measured in the MS/MSDs. The RPD of these values is 57.9 percent. The arsenic recoveries for BX310560 are 156.1 percent and 90 percent. The concentration of arsenic in the unspiked sample of BX310560 is 9.10 $\mu\text{g/g}$. The RPD of these values is 53.7 percent. The high RPDs associated with both of these MS/MSD pairs indicates a lack of precision for the method or more likely uneven dispersal of arsenic concentrations throughout the samples. The recoveries of MS/MSDs of BXG60200 exceeded the USEPA CLP advisory limit.

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Recoveries were 208.7 percent and 184.9 percent. The unspiked sample had an arsenic concentration of $8.1 \mu\text{g/g}$. Samples with similar matrices from Group 6 may have arsenic levels biased high based on the recoveries of BXG60200.

The same samples that were analyzed for arsenic were also analyzed for selenium. Two of those MS/MSD pairs, BX310560 and DXG60400, had recoveries that fell outside the USEPA range for inorganic recoveries. These samples are BX310560, DXG60400 and the respective MSDs. The recoveries of BX310560 were 127.7 percent and 124.6 percent. Selenium was not detected above CRL for the unspiked sample. The recoveries of DXG60400 were 49.6 percent and 45.8 percent. Sorptive qualities of the matrix for selenium could be responsible for the low recoveries.

There were eight soil samples from Group 6 spiked with lead for recovery analysis. These MS/MSD samples are BX310308, BX310560, BX500408, BX500915, BXG60200, BXG60325, BXG60855 and DXG60400. Of these samples, four had at least one recovery of the MS/MSD pair outside USEPA CLP limits. These samples are BX500408, BXG60200, BXG60325 and DXG60400. The recoveries of BX500408 were 78.4 percent and 73.3 percent. The low recovery could be a function of matrix interference but the value is so close to the USEPA CLP lower limit that it can not conclusively be attributed to that. The lead recoveries of BXG60200 are 165.4 percent and 154 percent. The lead concentration in the unspiked sample is $3.26 \mu\text{g/g}$. Since the lead spike concentration is only $4.00 \mu\text{g/g}$, the amount of lead in the unspiked sample could be enough to increase the amount recovered in the MS/MSD analysis. The recoveries of BXG60325 MS/MSDs are 133.3 percent and 109.2 percent. The recovery of one of these samples exceeds the USEPA CLP limit by 8.3 percent. This is not enough of an exceedance to conclusively attribute to matrix effects. The recoveries of DXG60400 are 91.8 percent and 62.4 percent. The RPD of these values is 39 percent.

There were three soil samples from Group 6 spiked with antimony for recovery analysis. These samples are BX300510, BXG60200 and DXG60400. All three samples had at least one of the MS/MSD recoveries below the USEPA CLP limit of 75 percent. These recoveries ranged from 71.7 percent to 73.6 percent. The recoveries of those samples falling within the USEPA limit were between 75 percent and 78.6 percent. Its obvious that whether due to matrix effects or processing at the laboratory the recoveries are consistently bordering the 75 percent USEPA limit. Antimony results therefore, may be biased slightly low for Group 6 soil samples.

Two Group 6 water samples were analyzed for inorganic spike recovery; MXG611X1 and WXG602XX. The MS/MSD recoveries of these water samples were within USEPA CLP limits for all elements except thallium, arsenic, and antimony. One sample, MXG611X1, was used for the analysis of these three elements. The thallium MS/MSD recoveries were 128 percent and 126 percent. Arsenic recoveries for the same sample pair are 130 percent and 129 percent. These recoveries just barely exceed the USEPA limit and do not indicate matrix interferences.

The recoveries of antimony for MXG611X1 are 166 percent and 165 percent. These recoveries indicate good precision with the RPD at 0.8 percent however the recoveries have exceeded USEPA CLP limits by roughly 40 percent. Antimony results for Group 6 may be biased high given this information.

2.7 GROUP 6 DUPLICATES

Duplicate soil samples were collected and analyzed from Group 6 study areas. Sample results were compared to duplicate results to determine how well they agreed. A measure of this agreement is provided through the calculation of the RPD. USEPA Region I protocols were used to evaluate the RPD values of inorganics, SVOCs and VOCs. The protocols provide limits for the RPDs that define the precision of the results. Duplicate results along with RPD values are presented in Table F-13.

Group 6 soil samples and duplicates were analyzed for the following methodologies: inorganics, SVOCs, VOCs, TOC and TPHC. No water samples/duplicates were analyzed from this group.

Inorganics

The following elements were included in the various inorganic methods used for Group 6 duplicate analysis: mercury (AEC method JB01), selenium (AEC method JD15), lead (AEC method JD17), arsenic (AEC method JD19), thallium (AEC method JD24), antimony (AEC method JD25) and silver, aluminum, barium, beryllium, calcium, cadmium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, sodium, nickel, vanadium, zinc (AEC method JS16).

A total of seven different soil duplicate samples were analyzed for inorganics. These samples are BX300108, BX310515, BXG60340, BD500608, BXG60760, BXG61112 and BX310304. Not all of the sample duplicates were analyzed for all of the elements listed above. Refer to Table F-13 to see which sample/duplicate pair was analyzed for which elements.

The following elements were reported in all of the previously mentioned inorganic samples and duplicates at concentrations above CRL values: lead, arsenic, aluminum, barium, calcium, cobalt, chromium, copper, iron, potassium, magnesium, manganese, sodium, nickel, vanadium and zinc. Beryllium was detected in only one sample each of the BX310515 and BXG60340 pair. The USEPA Region I criteria for the RPD of duplicates for inorganic soils is 50 percent. This RPD was exceeded by at least one sample/duplicate pair of samples for the following elements: lead, aluminum, chromium, potassium, magnesium, nickel, vanadium, and zinc.

There was an RPD of 130.5 percent for the lead results of the BXG60760 sample pair. The concentrations of the two samples were $0.989 \mu\text{g/g}$ and $4.700 \mu\text{g/g}$. The RPD for the difference in these samples is very high and as a result the precision is poor.

There was an RPD of 66.8 percent for the aluminum results of the BX310304 sample pair. Concentrations were reported at $5650 \mu\text{g/g}$ and $2820 \mu\text{g/g}$. The calculated RPD exceeds the 50 percent USEPA Region I by roughly 17 percent. This indicates a lack of consistency of the results for this sample/duplicate pair.

The RPD of the sample/duplicate pair of BX310515 in the chromium analysis was 81.9 percent. The chromium concentrations were reported at $18.8 \mu\text{g/g}$ and $7.88 \mu\text{g/g}$. An RPD of this magnitude represents poor precision. This should be taken into consideration during the review of chromium data for this sample.

The RPDs of the sample/duplicate pairs of BX310304 and BX310515 of potassium were 54.6 percent and 62.8 percent, respectively. Both samples were run in the lot YGZ. Both RPDs exceed the USEPA Region I limits.

The RPD of the sample duplicate pair BX310515 for magnesium is 72.1 percent. There was no precision shown by the laboratory for this method.

The RPD of the sample/duplicate pair BX310515 for nickel is 74 percent. An RPD of this magnitude indicates lack of agreement of the results. This should be taken into consideration with regards to nickel results for BX310515.

The RPD of the sample/duplicate pair of BX310515 for vanadium is 67.5 percent. The RPD value indicates that there is a big difference in concentrations for the samples. The sample concentrations of vanadium were reported at 4.32 $\mu\text{g/g}$ and 8.72 $\mu\text{g/g}$.

There was an RPD of 53.6 percent calculated for the zinc results of the BX310515 sample pair. The zinc concentrations were reported at 26.5 $\mu\text{g/g}$ and at 15.3 $\mu\text{g/g}$.

The sample/duplicate pair of BX310515 was responsible for seven out of eleven RPD exceedances. That statistic brands the inorganics results for this sample pair as the most unreliable of those reported. There is likely a reason for the lack of continuity of these results. A likely reason for it is the uneven distribution of the elements throughout the sample. Regardless of the reason the inorganics results for this sample need to be examined closely.

SVOCs

Three soil samples with their respective duplicates were submitted to determine agreement of concentrations of SVOC compounds. These samples are BX300108, BX310515 and BXG60340. AEC method LM18 was used to analyze these samples. There were no SVOC compounds reported above CRL in any of these sample pairs with the exception of pyrene detections in only one each of the BX300108 and BX310515 sets. Pyrene was reported at 0.080 $\mu\text{g/g}$ and < 0.033 $\mu\text{g/g}$ for BX300108. The RPD of these results is 83.2 percent. Pyrene results of BX310515 are 0.074 $\mu\text{g/g}$ and < 0.200 $\mu\text{g/g}$. The RPD of these results is 92 percent. The RPDs reported indicate that the results for both sample pairs do not agree well.

One inconsistency was noted in the SVOC duplicate data. The CRL values are different for non detect results of these compounds. The values are not different from each other by any consistent order of magnitude eliminating the possibility of a dilution factor changing them. The errors could possibly be due to transcription errors. The laboratory is investigating the reason for the differing CRLs.

VOCs

There were five soil sample/duplicate pairs analyzed for VOCs. These samples are BX300108, BX310515, BXG60340, BXG60760 and BXG61112. AEC method LM19 was used to determine the VOC concentrations in these samples. USEPA Region I guidelines were used to make determinations as to whether there was agreement in the results between samples and their respective duplicates. The USEPA guideline for measuring precision for volatile organics in soils is an RPD of no more than 50 percent. Only two volatile compounds were detected in the analysis. These compounds were identified as toluene and hexane. Toluene was reported in BXG60340 at $0.002 \mu\text{g/g}$ and $< 0.001 \mu\text{g/g}$. This is $0.001 \mu\text{g/g}$ over the CRL of $0.001 \mu\text{g/g}$. The RPD of the results is 66.7 percent. Toluene, although not found in any method LM19 method blanks, has been previously described as a laboratory contaminant. That is the likely source of its introduction into the sample. Hexane was detected in both samples of the sample/duplicate pair of BX310515 at $0.031 \mu\text{g/g}$ and $0.021 \mu\text{g/g}$. The RPD of these results is 38.5 percent. Hexane has not been listed as a target compound for this method. Although it is not defined as a common laboratory contaminant in the USEPA SOW, hexane is commonly used as a solvent.

Other Methods

Other methods for which duplicate samples were analyzed include TOC and TPHC. No USEPA criteria were used to measure the RPDs of the results. A duplicate sample of BXG61112 was collected for TOC duplicate comparisons. The concentrations obtained were $661 \mu\text{g/g}$ and $303 \mu\text{g/g}$. The RPD of these results is 74.3 percent.

Six samples along with their duplicates were analyzed for TPHC contamination. These samples are BXG6112, BX300108, BX310515, BD500608, BXG60340 and BXG60760. Low level petroleum contamination was reported in at least one of the sample pair for all samples. The RPDs for the samples ranged from 0.8 percent to 43.6 percent. For those samples reported as non-detect, the accompanying duplicate had TPHC concentrations very close to the CRL. The results indicate good precision for the method.

LABORATORY QC RESULTS

QA/QC BLANK RESULTS

Table F1
Summary of Detected Analytes in Quality Control Samples
Installation: Fort Devers, NA (DV)
Groups: 3, 5 and 6

METHOD BLANKS

Method Description	USATHANA Method Code	Test Name	MIN		MAX		Frequency
			Value	Units	Value	Units	
	00	TPHC	4		31.2	UGG	14 / 22
		TSS	4000		4500	UGL	4 / 20
	99	ALK	5000		5000	UGL	2 / 10
PB IN SOIL BY GFAA	JD17	PB	.217		.334	UGG	14 / 14
METALS IN SOIL BY ICAP	JS16	AL	883		1870	UGG	10 / 10
METALS IN SOIL BY ICAP		BA	6.98		25.7	UGG	6 / 10
METALS IN SOIL BY ICAP		CA	10800		11200	UGG	10 / 10
METALS IN SOIL BY ICAP		CR	5.06		6.25	UGG	6 / 10
METALS IN SOIL BY ICAP		CU	1.78		2.09	UGG	10 / 10
METALS IN SOIL BY ICAP		FE	1610		1960	UGG	10 / 10
METALS IN SOIL BY ICAP		K	263		385	UGG	10 / 10
METALS IN SOIL BY ICAP		MG	1520		1680	UGG	10 / 10
METALS IN SOIL BY ICAP		MN	7.2		7.93	UGG	10 / 10
METALS IN SOIL BY ICAP		NA	2770		2920	UGG	10 / 10
METALS IN SOIL BY ICAP		NI	1.88		1.88	UGG	2 / 10
METALS IN SOIL BY ICAP		V	3.74		6.2	UGG	10 / 10
METALS IN SOIL BY ICAP		ZN	8.05		12.4	UGG	10 / 10
BNA'S IN SOIL BY GC/MS	LM18	12EPCH	.3		.4	UGG	10 / 10
BNA'S IN SOIL BY GC/MS		B2EHP	1.1		1.1	UGG	2 / 26
BNA'S IN SOIL BY GC/MS		MEC6H5	.2		.2	UGG	2 / 2
BNA'S IN SOIL BY GC/MS		MESTOX	.3		.4	UGG	12 / 12
BNA'S IN SOIL BY GC/MS		UNK528	.2		.2	UGG	2 / 2
BNA'S IN SOIL BY GC/MS		UNK648	.8		.8	UGG	2 / 2
BNA'S IN SOIL BY GC/MS		UNK649	.4		.9	UGG	12 / 12
BNA'S IN SOIL BY GC/MS		UNK650	.3		.5	UGG	8 / 8
BNA'S IN SOIL BY GC/MS		UNK659	.3		.6	UGG	14 / 14
VOC'S IN SOIL BY GC/MS	LM19	ACET	.036		.036	UGG	2 / 48
VOC'S IN SOIL BY GC/MS		CCL3F	.008		.008	UGG	4 / 48
VOC'S IN SOIL BY GC/MS		CHCL3	.002		.002	UGG	2 / 48

Table F1
Summary of Detected Analytes in Quality Control Samples
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	MIN		MAX		Frequency
			Value	Units	Value	Units	
VOC'S IN SOIL BY GC/MS	LM19	UNK073	.05	.05 UGG			2 / 2
VOC'S IN SOIL BY GC/MS		UNK074	.008	.03 UGG			6 / 6
VOC'S IN SOIL BY GC/MS		UNK076	.005	.005 UGG			2 / 2
VOC'S IN SOIL BY GC/MS		UNK077	.006	.006 UGG			2 / 2
PB IN WATER BY GFAA	SD20	PB	1.6	1.8 UGL			4 / 12
METALS IN WATER BY ICAP	SS10	FE	143	143 UGL			2 / 12
METALS IN WATER BY ICAP		K	578	578 UGL			2 / 12
BNA'S IN WATER BY GC/MS	UM18	12EPCH	6	6 UGL			2 / 2
BNA'S IN WATER BY GC/MS		BZEHP	6.6	6.6 UGL			2 / 26
BNA'S IN WATER BY GC/MS		MESTOX	4	4 UGL			4 / 4
BNA'S IN WATER BY GC/MS		UNK543	6	6 UGL			2 / 2
VOC'S IN WATER BY GC/MS	UM20	111TCE	1.1	2.5 UGL			6 / 36
VOC'S IN WATER BY GC/MS		CHCL3	.5	1.3 UGL			16 / 36
VOC'S IN WATER BY GC/MS		MEC6H5	.5	.51 UGL			4 / 36

Table F2
Summary of Detected Analytes in Quality Control Samples
Installation: Fort Devens, MA (DV)
Groups: 3

RINSATE BLANKS

Method Description	USATHAMA Method Code	Test Name	MIN		MAX		Frequency
			Value	Units	Value	Units	
	99	ALK	256000	UGL	256000	UGL	1 / 1
		HCO3	312000	UGL	312000	UGL	1 / 1
PB IN WATER BY GFAA	SD20	PB	9.44	UGL	14.6	UGL	2 / 7
METALS IN WATER BY ICAP	SS10	BA	7.21	UGL	11.1	UGL	2 / 7
METALS IN WATER BY ICAP		CA	1160	UGL	1160	UGL	1 / 7
METALS IN WATER BY ICAP		FE	48.2	UGL	149	UGL	5 / 7
METALS IN WATER BY ICAP		K	504	UGL	995	UGL	5 / 7
METALS IN WATER BY ICAP		MN	3.24	UGL	3.27	UGL	2 / 7
METALS IN WATER BY ICAP		ZN	105	UGL	105	UGL	1 / 7
NO2, NO3 IN WATER	TF22	NIT	22.7	UGL	22.7	UGL	1 / 1
BNA'S IN WATER BY GC/MS	UM18	UNK540	4	UGL	4	UGL	1 / 1
BNA'S IN WATER BY GC/MS		UNK630	70	UGL	70	UGL	1 / 1
BNA'S IN WATER BY GC/MS		UNK631	5	UGL	5	UGL	1 / 1
VOC'S IN WATER BY GC/MS	UM20	111TCE	1.3	UGL	3.5	UGL	7 / 8
VOC'S IN WATER BY GC/MS		CH2CL2	10	UGL	10	UGL	2 / 8
VOC'S IN WATER BY GC/MS		CHCL3	.51	UGL	1.2	UGL	5 / 8
VOC'S IN WATER BY GC/MS		UNK134	20	UGL	20	UGL	1 / 1

Table F3
Summary of Detected Analytes in Quality Control Samples
Installation: Fort Devens, MA (DV)
Groups: 3

TRIP BLANKS

Method Description	USATHAMA		Test Name	MIN Value	MAX Value	Units	Frequency
	Method Code						
VOC'S IN WATER BY GC/MS	UM20		CH2CL2	2.64	4.7 UGL		4 / 6
VOC'S IN WATER BY GC/MS			UNK134	10	20 UGL		2 / 2
VOC'S IN WATER BY GC/MS			UNK178	30	30 UGL		1 / 1

Table F4
Summary of Detected Analytes in Quality Control Samples
Installation: Fort Devens, MA (DV)
Groups: 5

RINSATE BLANKS

Method Description	USATHAMA Method Code	Test Name	MIN Value	MAX Value	Units	Frequency
	00	HARD	12000	12000	UGL	1 / 1
	99	ALK HCO3	22000 26800	22000 26800	UGL UGL	1 / 1 1 / 1
METALS IN WATER BY ICAP	SS10	CA	6630	6630	UGL	1 / 2
METALS IN WATER BY ICAP		CU	20.1	20.1	UGL	1 / 2
METALS IN WATER BY ICAP		FE	71.5	71.5	UGL	1 / 2
METALS IN WATER BY ICAP		K	1100	1100	UGL	1 / 2
METALS IN WATER BY ICAP		MG	1730	1730	UGL	1 / 2
METALS IN WATER BY ICAP		MN	3.23	3.23	UGL	1 / 2
METALS IN WATER BY ICAP		NA	2730	2730	UGL	1 / 2
METALS IN WATER BY ICAP		ZN	25.8	25.8	UGL	1 / 2
NO2, NO3 IN WATER	TF22	NIT	320	320	UGL	1 / 1

Table F5
 Summary of Detected Analytes in Quality Control Samples
 Installation: Fort Devens, MA (DV)
 Groups: 5

TRIP BLANKS

Method Description	USATHAMA		Test Name	MIN Value	MAX Value	Units	Frequency
	Method Code	Test Name					
VOC'S IN WATER BY GC/MS	UM20	CH2CL2		4	8.6	UGL	4 / 10
VOC'S IN WATER BY GC/MS		UNK133		10	10	UGL	1 / 1

Table F6
Summary of Detected Analytes in Quality Control Samples
Installation: Fort Devens, MA (DV)
Groups: 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	Test Name	MIN		MAX		Frequency
			Value	Units	Value	Units	
	00	ALK	31000	UGL	31000	UGL	1 / 1
PB IN WATER BY GFAA	SD20	PB	8.68	UGL	8.68	UGL	1 / 4
METALS IN WATER BY ICAP	SS10	FE	85.5	UGL	85.5	UGL	1 / 2
METALS IN WATER BY ICAP		MN	3.2	UGL	3.2	UGL	1 / 2
VOC'S IN WATER BY GC/MS	UM20	111TCE	2.77	UGL	2.77	UGL	1 / 4
VOC'S IN WATER BY GC/MS		CHCL3	1.64	UGL	1.64	UGL	1 / 4
VOC'S IN WATER BY GC/MS		MEC6H5	.912	UGL	.912	UGL	1 / 4
VOC'S IN WATER BY GC/MS		UNK210	6	UGL	6	UGL	1 / 1

Table F7
 Summary of Detected Analytes in Quality Control Samples
 Installation: Fort Devers, MA (DV)
 Groups: 6

TRIP BLANKS

Method Description	USATHAMA		Test Name	MIN		MAX	
	Method Code			Value	Units	Value	Units
VOC'S IN WATER BY GC/MS	UM20	CH2CL2		3.2	3.8 UGL	3	10
VOC'S IN WATER BY GC/MS		UNK177		10	10 UGL	1	1

QA/QC DUPLICATE RESULTS

Table F9
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
SE IN SOIL BY GFAA	JD15	SE	BD440605	ZSL	07-JUL-1992	30-JUL-1992	7680.000	UGG	4.9
SE IN SOIL BY GFAA	JD15	SE	BD440605	ZSL	07-JUL-1992	30-JUL-1992	7310.000	UGG	4.9
SE IN SOIL BY GFAA	JD15	SE	BD520605	ZSJ	30-JUN-1992	27-JUL-1992	58.300	UGG	18.4
SE IN SOIL BY GFAA	JD15	SE	BD520605	ZSJ	30-JUN-1992	27-JUL-1992	48.500	UGG	18.4
PB IN SOIL BY GFAA	JD17	PB	BD440605	ZXF	07-JUL-1992	06-AUG-1992	5.120	UGG	15.1
PB IN SOIL BY GFAA	JD17	PB	BD440605	ZXF	07-JUL-1992	06-AUG-1992	4.400	UGG	15.1
PB IN SOIL BY GFAA	JD17	PB	BD520605	ZXD	30-JUN-1992	05-AUG-1992	8.100	UGG	25.5
PB IN SOIL BY GFAA	JD17	PB	BD520605	ZXD	30-JUN-1992	05-AUG-1992	6.270	UGG	25.5
AS IN SOIL BY GFAA	JD19	AS	BD440605	ZIX	07-JUL-1992	06-AUG-1992	11.500	UGG	11.0
AS IN SOIL BY GFAA	JD19	AS	BD440605	ZIX	07-JUL-1992	06-AUG-1992	10.300	UGG	11.0
AS IN SOIL BY GFAA	JD19	AS	BD520605	ZIT	30-JUN-1992	05-AUG-1992	19.000	UGG	17.1
AS IN SOIL BY GFAA	JD19	AS	BD520605	ZIT	30-JUN-1992	05-AUG-1992	16.000	UGG	17.1
TL IN SOIL BY GFAA	JD24	TL	BD440605	ZLE	07-JUL-1992	06-AUG-1992	0.500	UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BD440605	ZLE	07-JUL-1992	06-AUG-1992	0.500	UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BD520605	ZLD	30-JUN-1992	05-AUG-1992	0.500	UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BD520605	ZLD	30-JUN-1992	05-AUG-1992	0.500	UGG	.0
ALK	99	ALK	MXG303X1	ASL	29-JUL-1992	12-AUG-1992	230000.000	UGL	162.2
ALK	99	ALK	MXG303X1	ASJ	28-JUL-1992	09-AUG-1992	24000.000	UGL	162.2
HC03	99	HC03	MXG303X1	ASL	29-JUL-1992	12-AUG-1992	281000.000	UGL	162.2
HC03	99	HC03	MXG303X1	ASJ	28-JUL-1992	09-AUG-1992	29300.000	UGL	162.2
HG	JB01	HG	BD440605	ZQO	07-JUL-1992	21-JUL-1992	0.050	UGG	.0
HG	JB01	HG	BD440605	ZQO	07-JUL-1992	21-JUL-1992	0.050	UGG	.0
HG	JB01	HG	BD520605	ZQM	30-JUN-1992	23-JUL-1992	0.050	UGG	.0
HG	JB01	HG	BD520605	ZQM	30-JUN-1992	23-JUL-1992	0.050	UGG	.0
SE	JD15	SE	BD440605	ZSL	07-JUL-1992	05-AUG-1992	0.250	UGG	.0
SE	JD15	SE	BD440605	ZSL	07-JUL-1992	05-AUG-1992	0.250	UGG	.0
SE	JD15	SE	BD520605	ZSJ	30-JUN-1992	05-AUG-1992	0.250	UGG	.0
SE	JD15	SE	BD520605	ZSJ	30-JUN-1992	05-AUG-1992	0.250	UGG	.0
PB	JD17	PB	BD440605	ZXF	07-JUL-1992	06-AUG-1992	5.120	UGG	15.1
PB	JD17	PB	BD440605	ZXF	07-JUL-1992	06-AUG-1992	4.400	UGG	15.1
PB	JD17	PB	BD520605	ZXD	30-JUN-1992	05-AUG-1992	8.100	UGG	25.5
PB	JD17	PB	BD520605	ZXD	30-JUN-1992	05-AUG-1992	6.270	UGG	25.5
AS	JD19	AS	BD440605	ZIX	07-JUL-1992	06-AUG-1992	11.500	UGG	11.0
AS	JD19	AS	BD440605	ZIX	07-JUL-1992	06-AUG-1992	10.300	UGG	11.0
AS	JD19	AS	BD520605	ZIT	30-JUN-1992	05-AUG-1992	19.000	UGG	17.1
AS	JD19	AS	BD520605	ZIT	30-JUN-1992	05-AUG-1992	16.000	UGG	17.1
TL	JD24	TL	BD440605	ZLE	07-JUL-1992	06-AUG-1992	0.500	UGG	.0
TL	JD24	TL	BD440605	ZLE	07-JUL-1992	06-AUG-1992	0.500	UGG	.0
TL	JD24	TL	BD520605	ZLD	30-JUN-1992	05-AUG-1992	0.500	UGG	.0
TL	JD24	TL	BD520605	ZLD	30-JUN-1992	05-AUG-1992	0.500	UGG	.0
TSS	00	TSS	MXG303X1	ALT	28-JUL-1992	04-AUG-1992	4000.000	UGL	.0
TSS	00	TSS	MXG303X1	AGV	29-JUL-1992	31-JUL-1992	4000.000	UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
SB IN SOIL BY GFAA	JD25	SB	BX440605	ZME	07-JUL-1992	06-AUG-1992	<	1.090	UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BX440605	ZME	07-JUL-1992	06-AUG-1992	<	1.090	UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BX520605	ZMD	30-JUN-1992	05-AUG-1992	<	1.090	UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BX520605	ZMD	30-JUN-1992	05-AUG-1992	<	1.090	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BX440605	ZJP	07-JUL-1992	23-JUL-1992	<	0.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BX440605	ZJP	07-JUL-1992	23-JUL-1992	<	0.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BX520605	ZJN	30-JUN-1992	21-JUL-1992	<	0.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BX520605	ZJN	30-JUN-1992	21-JUL-1992	<	0.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AL	BX440605	ZJP	07-JUL-1992	23-JUL-1992		5040.000	UGG	4.5
METALS IN SOIL BY ICAP	JS16	AL	BX440605	ZJP	07-JUL-1992	23-JUL-1992		4820.000	UGG	4.5
METALS IN SOIL BY ICAP	JS16	AL	BX520605	ZJN	30-JUN-1992	21-JUL-1992		5160.000	UGG	16.1
METALS IN SOIL BY ICAP	JS16	AL	BX520605	ZJN	30-JUN-1992	21-JUL-1992		4390.000	UGG	16.1
METALS IN SOIL BY ICAP	JS16	BA	BX440605	ZJP	07-JUL-1992	23-JUL-1992		15.900	UGG	7.8
METALS IN SOIL BY ICAP	JS16	BA	BX440605	ZJP	07-JUL-1992	23-JUL-1992		14.700	UGG	7.8
METALS IN SOIL BY ICAP	JS16	BA	BX520605	ZJN	30-JUN-1992	21-JUL-1992		21.000	UGG	7.4
METALS IN SOIL BY ICAP	JS16	BA	BX520605	ZJN	30-JUN-1992	21-JUL-1992		19.500	UGG	7.4
METALS IN SOIL BY ICAP	JS16	BE	BX440605	ZJP	07-JUL-1992	23-JUL-1992	<	0.500	UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	BX440605	ZJP	07-JUL-1992	23-JUL-1992	<	0.500	UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	BX520605	ZJN	30-JUN-1992	21-JUL-1992	<	0.628	UGG	22.7
METALS IN SOIL BY ICAP	JS16	BE	BX520605	ZJN	30-JUN-1992	21-JUL-1992	<	0.500	UGG	22.7
METALS IN SOIL BY ICAP	JS16	CA	BX440605	ZJP	07-JUL-1992	23-JUL-1992		249.000	UGG	15.1
METALS IN SOIL BY ICAP	JS16	CA	BX440605	ZJP	07-JUL-1992	23-JUL-1992		214.000	UGG	15.1
METALS IN SOIL BY ICAP	JS16	CA	BX520605	ZJN	30-JUN-1992	21-JUL-1992		439.000	UGG	12.8
METALS IN SOIL BY ICAP	JS16	CA	BX520605	ZJN	30-JUN-1992	21-JUL-1992		386.000	UGG	12.8
METALS IN SOIL BY ICAP	JS16	CD	BX440605	ZJP	07-JUL-1992	23-JUL-1992	<	0.700	UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BX440605	ZJP	07-JUL-1992	23-JUL-1992	<	0.700	UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BX520605	ZJN	30-JUN-1992	21-JUL-1992	<	0.700	UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BX520605	ZJN	30-JUN-1992	21-JUL-1992	<	0.700	UGG	.0
METALS IN SOIL BY ICAP	JS16	CO	BX440605	ZJP	07-JUL-1992	23-JUL-1992		3.330	UGG	20.9
METALS IN SOIL BY ICAP	JS16	CO	BX440605	ZJP	07-JUL-1992	23-JUL-1992		2.700	UGG	20.9
METALS IN SOIL BY ICAP	JS16	CO	BX520605	ZJN	30-JUN-1992	21-JUL-1992		4.350	UGG	10.9
METALS IN SOIL BY ICAP	JS16	CO	BX520605	ZJN	30-JUN-1992	21-JUL-1992		3.900	UGG	10.9
METALS IN SOIL BY ICAP	JS16	CR	BX440605	ZJP	07-JUL-1992	23-JUL-1992		10.600	UGG	4.8
METALS IN SOIL BY ICAP	JS16	CR	BX440605	ZJP	07-JUL-1992	23-JUL-1992		10.100	UGG	4.8
METALS IN SOIL BY ICAP	JS16	CR	BX520605	ZJN	30-JUN-1992	21-JUL-1992		15.200	UGG	13.3

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
METALS IN SOIL BY ICAP	JS16	CR	BD520605	ZJN	30-JUN-1992	21-JUL-1992	13.300 UGG	13.3
METALS IN SOIL BY ICAP	JS16	CU	BD440605	ZJP	07-JUL-1992	23-JUL-1992	6.720 UGG	1.5
METALS IN SOIL BY ICAP	JS16	CU	BX440605	ZJP	07-JUL-1992	23-JUL-1992	6.620 UGG	1.5
METALS IN SOIL BY ICAP	JS16	CU	BD520605	ZJN	30-JUN-1992	21-JUL-1992	9.140 UGG	.3
METALS IN SOIL BY ICAP	JS16	CU	BX520605	ZJN	30-JUN-1992	21-JUL-1992	9.110 UGG	.3
METALS IN SOIL BY ICAP	JS16	FE	BD440605	ZJP	07-JUL-1992	23-JUL-1992	8400.000 UGG	10.5
METALS IN SOIL BY ICAP	JS16	FE	BD440605	ZJP	07-JUL-1992	23-JUL-1992	7560.000 UGG	10.5
METALS IN SOIL BY ICAP	JS16	FE	BX520605	ZJN	30-JUN-1992	21-JUL-1992	7910.000 UGG	15.7
METALS IN SOIL BY ICAP	JS16	FE	BD520605	ZJN	30-JUN-1992	21-JUL-1992	6760.000 UGG	15.7
METALS IN SOIL BY ICAP	JS16	K	BD440605	ZJP	07-JUL-1992	23-JUL-1992	395.000 UGG	15.6
METALS IN SOIL BY ICAP	JS16	K	BD440605	ZJP	07-JUL-1992	23-JUL-1992	338.000 UGG	15.6
METALS IN SOIL BY ICAP	JS16	K	BX520605	ZJN	30-JUN-1992	21-JUL-1992	912.000 UGG	6.1
METALS IN SOIL BY ICAP	JS16	K	BD520605	ZJN	30-JUN-1992	21-JUL-1992	858.000 UGG	6.1
METALS IN SOIL BY ICAP	JS16	MG	BD440605	ZJP	07-JUL-1992	23-JUL-1992	1890.000 UGG	2.7
METALS IN SOIL BY ICAP	JS16	MG	BD440605	ZJP	07-JUL-1992	23-JUL-1992	1840.000 UGG	2.7
METALS IN SOIL BY ICAP	JS16	MG	BX520605	ZJN	30-JUN-1992	21-JUL-1992	2590.000 UGG	19.5
METALS IN SOIL BY ICAP	JS16	MG	BD520605	ZJN	30-JUN-1992	21-JUL-1992	2130.000 UGG	19.5
METALS IN SOIL BY ICAP	JS16	MN	BD440605	ZJP	07-JUL-1992	23-JUL-1992	148.000 UGG	22.6
METALS IN SOIL BY ICAP	JS16	MN	BD440605	ZJP	07-JUL-1992	23-JUL-1992	118.000 UGG	22.6
METALS IN SOIL BY ICAP	JS16	MN	BX520605	ZJN	30-JUN-1992	21-JUL-1992	162.000 UGG	8.4
METALS IN SOIL BY ICAP	JS16	MN	BD520605	ZJN	30-JUN-1992	21-JUL-1992	149.000 UGG	8.4
METALS IN SOIL BY ICAP	JS16	NA	BD440605	ZJP	07-JUL-1992	23-JUL-1992	152.000 UGG	9.7
METALS IN SOIL BY ICAP	JS16	NA	BX440605	ZJP	07-JUL-1992	23-JUL-1992	138.000 UGG	9.7
METALS IN SOIL BY ICAP	JS16	NA	BX520605	ZJN	30-JUN-1992	21-JUL-1992	165.000 UGG	9.5
METALS IN SOIL BY ICAP	JS16	NA	BD520605	ZJN	30-JUN-1992	21-JUL-1992	150.000 UGG	9.5
METALS IN SOIL BY ICAP	JS16	NI	BD440605	ZJP	07-JUL-1992	23-JUL-1992	9.930 UGG	4.2
METALS IN SOIL BY ICAP	JS16	NI	BX440605	ZJP	07-JUL-1992	23-JUL-1992	9.520 UGG	4.2
METALS IN SOIL BY ICAP	JS16	NI	BX520605	ZJN	30-JUN-1992	21-JUL-1992	14.200 UGG	11.2
METALS IN SOIL BY ICAP	JS16	NI	BD520605	ZJN	30-JUN-1992	21-JUL-1992	12.700 UGG	11.2
METALS IN SOIL BY ICAP	JS16	V	BD440605	ZJP	07-JUL-1992	23-JUL-1992	7.640 UGG	12.4
METALS IN SOIL BY ICAP	JS16	V	BX440605	ZJP	07-JUL-1992	23-JUL-1992	6.750 UGG	12.4
METALS IN SOIL BY ICAP	JS16	V	BX520605	ZJN	30-JUN-1992	21-JUL-1992	10.200 UGG	16.9
METALS IN SOIL BY ICAP	JS16	V	BD520605	ZJN	30-JUN-1992	21-JUL-1992	8.610 UGG	16.9
METALS IN SOIL BY ICAP	JS16	ZN	BD440605	ZJP	07-JUL-1992	23-JUL-1992	18.800 UGG	2.7
METALS IN SOIL BY ICAP	JS16	ZN	BD440605	ZJP	07-JUL-1992	23-JUL-1992	18.300 UGG	2.7
METALS IN SOIL BY ICAP	JS16	ZN	BX520605	ZJN	30-JUN-1992	21-JUL-1992	21.400 UGG	10.8
METALS IN SOIL BY ICAP	JS16	ZN	BD520605	ZJN	30-JUN-1992	21-JUL-1992	19.200 UGG	10.8

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Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.080 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.600 UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.200 UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.500 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.600 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.300 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.490 UGG	84.1
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.200 UGG	84.1
BNA'S IN SOIL BY GC/MS	LM18	1MNAP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	1MNAP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.500 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.800 UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.300 UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.900 UGG	76.9
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.400 UGG	76.9
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	7.000 UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	240MPN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	7.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	240MPN	BD520605	ZNL	30-JUN-1992	28-JUL-1992	3.450 UGG	110.1
BNA'S IN SOIL BY GC/MS	LM18	240MPN	BD520605	ZNM	30-JUN-1992	24-JUL-1992	1.000 UGG	110.1
BNA'S IN SOIL BY GC/MS	LM18	240NP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	240NP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	240NP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	6.000 UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	240NP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	2.000 UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	240NT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	240NT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	240NT	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.700 UGG	80.0
BNA'S IN SOIL BY GC/MS	LM18	240NT	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.300 UGG	80.0
BNA'S IN SOIL BY GC/MS	LM18	260NT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	260NT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	260NT	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.425 UGG	72.0
BNA'S IN SOIL BY GC/MS	LM18	260NT	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.200 UGG	72.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.300 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.120 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.180 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2CNAP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.072 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2MNP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2MNP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2MNP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.245 UGG	84.1
BNA'S IN SOIL BY GC/MS	LM18	2MNP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.100 UGG	84.1
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.145 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.058 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.310 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2NANIL	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.124 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	1.000 UGG	.0

Table F9
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.700 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	2NP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.280 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	BD440605	ZNS	07-JUL-1992	31-JUL-1992	60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	BD440605	ZNS	07-JUL-1992	31-JUL-1992	60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	BD520605	ZNL	30-JUN-1992	28-JUL-1992	31.500 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	BD520605	ZNM	30-JUN-1992	24-JUL-1992	12.600 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	2.250 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.900 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	BD440605	ZNS	07-JUL-1992	31-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	BD440605	ZNS	07-JUL-1992	31-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	BD520605	ZNL	30-JUN-1992	28-JUL-1992	2.750 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	46DN2C	BD520605	ZNM	30-JUN-1992	24-JUL-1992	1.100 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.165 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.066 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	4.050 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	BD520605	ZNM	30-JUN-1992	24-JUL-1992	1.620 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	BD440605	ZNS	07-JUL-1992	31-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	BD440605	ZNS	07-JUL-1992	31-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.475 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.190 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.165 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.066 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4MP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	1.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4MP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	0.480 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	2.050 UGG	85.7

Table F9
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.820 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4NP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 7.000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	4NP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 2.800 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ABHC	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	ABHC	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 3.000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 1.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.180 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.072 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.165 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.066 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.165 UGG	14.3
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.143 UGG	14.3
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.295 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.118 UGG	85.7

Table F9
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Method Description	USATHAWA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	B2C1PE	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2C1PE	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2C1PE	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	1.000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	B2C1PE	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.400 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.165 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.066 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	3.100 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	1.240 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.800 UGG	68.7
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.391 UGG	68.7
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	1.250 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.500 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	1.050 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.420 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.800 UGG	80.7
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.340 UGG	80.7
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	B0440605	ZNS	07-JUL-1992	31-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	B0520605	ZNL	30-JUN-1992	28-JUL-1992	<	3.000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	1.200 UGG	85.7

Table F9
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 9,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 9,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 4,000 UGG	75.9
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 1,800 UGG	75.9
BNA'S IN SOIL BY GC/MS	LM18	BENZO	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 60,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZO	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 60,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZO	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 30,000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BENZO	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 12,000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 1,250 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BGHIPY	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0,500 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0,700 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0,700 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0,430 UGG	26.3
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0,330 UGG	26.3
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 10,000 UGG	185.4
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0,380 UGG	185.4
BNA'S IN SOIL BY GC/MS	LM18	C12	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 100,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	C12	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 100,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	C13	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 100,000 UGG	22.2
BNA'S IN SOIL BY GC/MS	LM18	C13	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 80,000 UGG	22.2
BNA'S IN SOIL BY GC/MS	LM18	C14	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 200,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	C14	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 200,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	C15	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 100,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	C15	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 100,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	C16	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 80,000 UGG	13.3
BNA'S IN SOIL BY GC/MS	LM18	C16	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 70,000 UGG	13.3
BNA'S IN SOIL BY GC/MS	LM18	C17	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 30,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	C17	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 30,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0,300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0,300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0,165 UGG	85.7

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.066 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.761 UGG	23.7
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.600 UGG	23.7
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.165 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.066 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 31.000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 12.400 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.800 UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.300 UGG	90.9
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 1.050 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.420 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 0.175 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.070 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DEP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 1.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DEP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.480 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BX440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	< 3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BD520605	ZNL	30-JUN-1992	28-JUL-1992	< 2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BX520605	ZNM	30-JUN-1992	24-JUL-1992	< 0.600 UGG	107.7

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	DMP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.800 UGG	80.7
BNA'S IN SOIL BY GC/MS	LM18	DMP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.340 UGG	80.7
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.305 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.122 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	10.000 UGG	185.4
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.380 UGG	185.4
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	2.000 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	1.000 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	2.000 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	1.000 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	2.000 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	1.000 UGG	66.7
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	3.000 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	1.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	FANT	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.700 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	FANT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	0.700 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	FANT	BD520605	ZNL	30-JUN-1992	24-JUL-1992	<	1.920 UGG	139.8
BNA'S IN SOIL BY GC/MS	LM18	FANT	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.340 UGG	139.8
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BX440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	0.165 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BX520605	ZNM	30-JUN-1992	24-JUL-1992	<	0.066 UGG	85.7

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	GC/DAN	BX440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	GC/DAN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	GC/DAN	BD520605	ZNL	30-JUN-1992	28-JUL-1992	2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	GC/DAN	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	HCBD	BX440605	ZNS	07-JUL-1992	31-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	BD440605	ZNS	07-JUL-1992	31-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	BD520605	ZNL	30-JUN-1992	28-JUL-1992	1.150 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	HCBD	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.460 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BX440605	ZNS	07-JUL-1992	31-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.500 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.200 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BX440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BX440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BD520605	ZNL	30-JUN-1992	28-JUL-1992	1.450 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.580 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BX440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	0.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.165 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.066 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	LIN	BX440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	BD520605	ZNL	30-JUN-1992	28-JUL-1992	2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	LIN	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BX440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BD520605	ZNL	30-JUN-1992	28-JUL-1992	2.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.600 UGG	107.7
BNA'S IN SOIL BY GC/MS	LM18	NAP	BX440605	ZNS	07-JUL-1992	31-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	0.185 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	NAP	BX520605	ZNM	30-JUN-1992	24-JUL-1992	0.074 UGG	85.7
BNA'S IN SOIL BY GC/MS	LM18	NB	BX440605	ZNS	07-JUL-1992	31-JUL-1992	0.400 UGG	.0

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BNA'S IN SOIL BY GC/MS	LM18	NB	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	NB	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	185.4
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	185.4
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	85.7
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	79.1
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	79.1
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	40.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	40.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	154.3
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	154.3
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	92.7
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	92.7
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	107.7
BNA'S IN SOIL BY GC/MS	LM18	PYR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BD520605	ZNM	30-JUN-1992	24-JUL-1992	<	143.3
BNA'S IN SOIL BY GC/MS	LM18	PYR	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	143.3
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BD440605	ZNS	07-JUL-1992	31-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BD520605	ZNL	30-JUN-1992	28-JUL-1992	<	107.7

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USATHAMA		IRDMIS		Lot	Sample Date	Analysis Date	Value Units	RPD
Method Description	Test Name	Method Code	Sample Number					
BNA'S IN SOIL BY GC/MS	TXPHEN	LM18	BX520605	ZNM	30-JUN-1992	24-JUL-1992	6.000 UGG	107.7
BNA'S IN SOIL BY GC/MS	UNK552	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	70.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK552	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	70.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK557	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK557	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK558	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK558	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK562	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK562	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK563	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK563	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK565	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK565	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK566	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK566	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK567	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	40.0
BNA'S IN SOIL BY GC/MS	UNK567	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	40.0
BNA'S IN SOIL BY GC/MS	UNK571	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK571	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK574	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK574	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK579	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	30.000 UGG	40.0
BNA'S IN SOIL BY GC/MS	UNK579	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	20.000 UGG	40.0
BNA'S IN SOIL BY GC/MS	UNK580	LM18	BD440605	ZNS	07-JUL-1992	31-JUL-1992	70.000 UGG	.0
BNA'S IN SOIL BY GC/MS	UNK580	LM18	BX440605	ZNS	07-JUL-1992	31-JUL-1992	70.000 UGG	.0
VOC'S IN SOIL BY GC/MS	111TCE	LM19	BX440605	ZTN	07-JUL-1992	17-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	111TCE	LM19	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	111TCE	LM19	BD520400	ZTM	30-JUN-1992	13-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	111TCE	LM19	BX520400	ZTK	30-JUN-1992	08-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	111TCE	LM19	BX520605	ZTK	30-JUN-1992	08-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	111TCE	LM19	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.004 UGG	.0

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Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units		RPD
							<	<	
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.030 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.030 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BD520400	ZTK	30-JUN-1992	08-JUL-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.008 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.008 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BD440605	ZTN	07-JUL-1992	21-JUL-1992	<	0.050 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.050 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.010 UGG	.0

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VOC'S IN SOIL BY GC/MS	2CLEVE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	2CLEVE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	ACET	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.080 UGG	.0
VOC'S IN SOIL BY GC/MS	ACET	BD440605	ZTN	07-JUL-1992	21-JUL-1992	0.080 UGG	.0
VOC'S IN SOIL BY GC/MS	ACET	BD520400	ZTM	30-JUN-1992	13-JUL-1992	0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	ACET	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	ACET	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	ACET	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	ACROLN	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.500 UGG	.0
VOC'S IN SOIL BY GC/MS	ACROLN	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.500 UGG	.0
VOC'S IN SOIL BY GC/MS	ACROLN	BD520400	ZTM	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	ACROLN	BD520400	ZTK	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	ACROLN	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	ACRYLO	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.500 UGG	.0
VOC'S IN SOIL BY GC/MS	ACRYLO	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.500 UGG	.0
VOC'S IN SOIL BY GC/MS	ACRYLO	BD520400	ZTM	30-JUN-1992	13-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	ACRYLO	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	ACRYLO	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	ACRYLO	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	BRDCLM	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	BRDCLM	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	BRDCLM	BD520400	ZTM	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	BRDCLM	BD520400	ZTJ	30-JUN-1992	13-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	BRDCLM	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	BRDCLM	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C13DCP	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	C13DCP	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	C13DCP	BD520400	ZTM	30-JUN-1992	13-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C13DCP	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C13DCP	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C13DCP	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C2AVE	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	C2AVE	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	C2AVE	BD520400	ZTM	30-JUN-1992	13-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C2AVE	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C2AVE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C2AVE	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	C2H3CL	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.030 UGG	.0

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USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN SOIL BY GC/MS	C2H3CL	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.030 UGG
VOC'S IN SOIL BY GC/MS	C2H3CL	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	C2H3CL	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	C2H3CL	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	C2H3CL	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	C2H5CL	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.060 UGG
VOC'S IN SOIL BY GC/MS	C2H5CL	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.060 UGG
VOC'S IN SOIL BY GC/MS	C2H5CL	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	C2H5CL	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	C2H5CL	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	C2H5CL	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	C6H6	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.008 UGG
VOC'S IN SOIL BY GC/MS	C6H6	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.008 UGG
VOC'S IN SOIL BY GC/MS	C6H6	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.002 UGG
VOC'S IN SOIL BY GC/MS	C6H6	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.002 UGG
VOC'S IN SOIL BY GC/MS	C6H6	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG
VOC'S IN SOIL BY GC/MS	C6H6	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG
VOC'S IN SOIL BY GC/MS	CCL3F	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.030 UGG
VOC'S IN SOIL BY GC/MS	CCL3F	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.030 UGG
VOC'S IN SOIL BY GC/MS	CCL3F	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	CCL3F	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	CCL3F	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	CCL3F	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	CCL4	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.040 UGG
VOC'S IN SOIL BY GC/MS	CCL4	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.040 UGG
VOC'S IN SOIL BY GC/MS	CCL4	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.007 UGG
VOC'S IN SOIL BY GC/MS	CCL4	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.007 UGG
VOC'S IN SOIL BY GC/MS	CCL4	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.007 UGG
VOC'S IN SOIL BY GC/MS	CCL4	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.007 UGG
VOC'S IN SOIL BY GC/MS	CH2CL2	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.060 UGG
VOC'S IN SOIL BY GC/MS	CH2CL2	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.060 UGG
VOC'S IN SOIL BY GC/MS	CH2CL2	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	CH2CL2	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	CH2CL2	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	CH2CL2	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.012 UGG
VOC'S IN SOIL BY GC/MS	CH3BR	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.030 UGG
VOC'S IN SOIL BY GC/MS	CH3BR	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.030 UGG
VOC'S IN SOIL BY GC/MS	CH3BR	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	CH3BR	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.006 UGG
VOC'S IN SOIL BY GC/MS	CH3BR	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.006 UGG

Table F9
Sample Duplicate Quality Control Report
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Group: 3

Method Description	USATHAMA Method Code	Test Name	IRDM1S Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.040 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.040 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD520400	ZTK	30-JUN-1992	08-JUL-1992	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.030 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.030 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD520400	ZTK	30-JUN-1992	13-JUL-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD520400	ZTK	30-JUN-1992	13-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.500 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.500 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD520400	ZTK	30-JUN-1992	13-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD440605	ZTN	07-JUL-1992	21-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD440605	ZTU	07-JUL-1992	17-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD520400	ZTK	30-JUN-1992	13-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD520400	ZTK	30-JUN-1992	13-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD520605	ZTK	30-JUN-1992	08-JUL-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BD440605	ZTN	07-JUL-1992	17-JUL-1992	0.020 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BD440605	ZTU	07-JUL-1992	21-JUL-1992	0.020 UGG	.0

Table F9
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.500 UGG	193.7
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.008 UGG	193.7
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.050 UGG	170.4
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.004 UGG	170.4
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.400 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.400 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BX440605	ZTU	07-JUL-1992	17-JUL-1992	<	0.200 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BD440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.200 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BD520400	ZTJ	30-JUN-1992	13-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BX520400	ZTM	30-JUN-1992	08-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BD440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BD520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BD520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BD520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0

Table F9
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX440605	ZTU	07-JUL-1992	17-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX440605	ZTU	07-JUL-1992	21-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX440605	ZTU	07-JUL-1992	21-JUL-1992	<	4.000 UGG	196.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX440605	ZTN	07-JUL-1992	17-JUL-1992	<	0.040 UGG	196.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX520400	ZTJ	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX520400	ZTM	30-JUN-1992	13-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX520605	ZTK	30-JUN-1992	08-JUL-1992	<	0.002 UGG	.0
HG IN WATER BY CVAA	SB01	HG	MXG303X1	YVX	28-JUL-1992	05-AUG-1992	<	0.243 UGL	.0
HG IN WATER BY CVAA	SB01	HG	MXG303X1	YVX	29-JUL-1992	05-AUG-1992	<	0.243 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MXG303X1	ZK1	29-JUL-1992	13-AUG-1992	<	6.990 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MXG303X1	ZK1	28-JUL-1992	13-AUG-1992	<	6.990 UGL	.0
PB IN WATER BY GFAA	SD20	PB	MXG303X1	ZUI	28-JUL-1992	10-AUG-1992	<	2.390 UGL	26.0

Table F9
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
PB IN WATER BY GFAA	SD20	PB	MXG303X1	ZUJ	29-JUL-1992	10-AUG-1992	<	1.840 UGL	26.0
SE IN WATER BY GFAA	SD21	SE	MXG303X1	ZGO	29-JUL-1992	08-AUG-1992	<	3.020 UGL	.0
SE IN WATER BY GFAA	SD21	SE	MXG303X1	ZGO	28-JUL-1992	08-AUG-1992	<	3.020 UGL	.0
AS IN WATER BY GFAA	SD22	AS	MXG303X1	AAD	29-JUL-1992	08-AUG-1992	<	2.540 UGL	.0
AS IN WATER BY GFAA	SD22	AS	MXG303X1	AAD	28-JUL-1992	08-AUG-1992	<	2.540 UGL	.0
SB IN WATER BY GFAA	SD28	SB	MXG303X1	YNG	29-JUL-1992	12-SEP-1992	<	3.030 UGL	.0
SB IN WATER BY GFAA	SD28	SB	MXG303X1	YNG	28-JUL-1992	12-SEP-1992	<	3.030 UGL	.0
METALS IN WATER BY ICAP	SS10	AG	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	4.600 UGL	.0
METALS IN WATER BY ICAP	SS10	AG	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	4.600 UGL	.0
METALS IN WATER BY ICAP	SS10	AL	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	304.000 UGL	73.3
METALS IN WATER BY ICAP	SS10	AL	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	141.000 UGL	73.3
METALS IN WATER BY ICAP	SS10	BA	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	14.600 UGL	68.3
METALS IN WATER BY ICAP	SS10	BA	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	7.170 UGL	68.3
METALS IN WATER BY ICAP	SS10	BE	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	5.000 UGL	.0
METALS IN WATER BY ICAP	SS10	BE	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	5.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CA	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	8090.000 UGL	51.0
METALS IN WATER BY ICAP	SS10	CA	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	4800.000 UGL	51.0
METALS IN WATER BY ICAP	SS10	CD	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	4.010 UGL	.0
METALS IN WATER BY ICAP	SS10	CD	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	4.010 UGL	.0
METALS IN WATER BY ICAP	SS10	CO	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	25.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CO	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	25.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CR	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	6.020 UGL	.0
METALS IN WATER BY ICAP	SS10	CR	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	6.020 UGL	.0
METALS IN WATER BY ICAP	SS10	CU	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	8.090 UGL	.0
METALS IN WATER BY ICAP	SS10	CU	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	8.090 UGL	.0
METALS IN WATER BY ICAP	SS10	FE	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	421.000 UGL	51.7
METALS IN WATER BY ICAP	SS10	FE	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	<	248.000 UGL	51.7
METALS IN WATER BY ICAP	SS10	K	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	<	1210.000 UGL	105.4

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Group: 3

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
METALS IN WATER BY ICAP	SS10	K	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	< 375.000 UGL	105.4
METALS IN WATER BY ICAP	SS10	MG	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	515.000 UGL	3.0
METALS IN WATER BY ICAP	SS10	MG	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	500.000 UGL	3.0
METALS IN WATER BY ICAP	SS10	MN	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	791.000 UGL	163.1
METALS IN WATER BY ICAP	SS10	MN	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	80.300 UGL	163.1
METALS IN WATER BY ICAP	SS10	NA	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	18600.000 UGL	18.2
METALS IN WATER BY ICAP	SS10	NA	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	15500.000 UGL	18.2
METALS IN WATER BY ICAP	SS10	NI	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	34.300 UGL	.0
METALS IN WATER BY ICAP	SS10	NI	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	34.300 UGL	.0
METALS IN WATER BY ICAP	SS10	V	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	11.000 UGL	.0
METALS IN WATER BY ICAP	SS10	V	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	11.000 UGL	.0
METALS IN WATER BY ICAP	SS10	ZN	MXG303X1	ZZE	28-JUL-1992	05-AUG-1992	21.100 UGL	.0
METALS IN WATER BY ICAP	SS10	ZN	MXG303X1	ZZE	29-JUL-1992	05-AUG-1992	21.100 UGL	.0
NO2, NO3 IN WATER	TF22	NIT	MXG303X1	XXQ	29-JUL-1992	12-AUG-1992	1800.000 UGL	25.0
NO2, NO3 IN WATER	TF22	NIT	MXG303X1	XXQ	28-JUL-1992	12-AUG-1992	1400.000 UGL	25.0
SO4 IN WATER	TT10	CL	MXG303X1	AKC	29-JUL-1992	17-AUG-1992	21200.000 UGL	24.3
SO4 IN WATER	TT10	CL	MXG303X1	AKC	28-JUL-1992	17-AUG-1992	16600.000 UGL	24.3
SO4 IN WATER	TT10	SO4	MXG303X1	AKC	28-JUL-1992	17-AUG-1992	10000.000 UGL	.0
SO4 IN WATER	TT10	SO4	MXG303X1	AKC	29-JUL-1992	17-AUG-1992	10000.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	124TCB	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	1.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	124TCB	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	1.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	1.700 UGL	.0

Table F9
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	245TCP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 5.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 5.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 4.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 4.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 2.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 2.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 5.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 5.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 4.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 4.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 0.790 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 0.790 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 0.990 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 0.990 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NNAP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NNAP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 3.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 3.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 4.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 4.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 12.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 12.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	3NANIL	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 4.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	3NANIL	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 4.900 UGL	.0

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USATHAMA		IRDMIS							
Method	Test	Sample	Lot	Sample	Analysis	Value	Units	RPD	
Code	Name	Number		Date	Date				
Method Description									
BNA'S IN WATER BY GC/MS	46N2C	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	17.000 UGL	.0	
BNA'S IN WATER BY GC/MS	46N2C	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	17.000 UGL	.0	
BNA'S IN WATER BY GC/MS	4BRPPE	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.200 UGL	.0	
BNA'S IN WATER BY GC/MS	4BRPPE	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.200 UGL	.0	
BNA'S IN WATER BY GC/MS	4CANIL	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	7.300 UGL	.0	
BNA'S IN WATER BY GC/MS	4CANIL	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	7.300 UGL	.0	
BNA'S IN WATER BY GC/MS	4CL3C	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.000 UGL	.0	
BNA'S IN WATER BY GC/MS	4CL3C	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.000 UGL	.0	
BNA'S IN WATER BY GC/MS	4CLPPE	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	5.100 UGL	.0	
BNA'S IN WATER BY GC/MS	4CLPPE	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	5.100 UGL	.0	
BNA'S IN WATER BY GC/MS	4NP	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	0.520 UGL	.0	
BNA'S IN WATER BY GC/MS	4NP	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	0.520 UGL	.0	
BNA'S IN WATER BY GC/MS	4NANIL	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	5.200 UGL	.0	
BNA'S IN WATER BY GC/MS	4NANIL	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	5.200 UGL	.0	
BNA'S IN WATER BY GC/MS	4NP	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	12.000 UGL	.0	
BNA'S IN WATER BY GC/MS	4NP	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	12.000 UGL	.0	
BNA'S IN WATER BY GC/MS	ABHC	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.000 UGL	.0	
BNA'S IN WATER BY GC/MS	ABHC	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.000 UGL	.0	
BNA'S IN WATER BY GC/MS	ACLDAN	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	5.100 UGL	.0	
BNA'S IN WATER BY GC/MS	ACLDAN	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	5.100 UGL	.0	
BNA'S IN WATER BY GC/MS	AENSLF	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	9.200 UGL	.0	
BNA'S IN WATER BY GC/MS	AENSLF	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	9.200 UGL	.0	
BNA'S IN WATER BY GC/MS	ALDRN	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.700 UGL	.0	
BNA'S IN WATER BY GC/MS	ALDRN	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.700 UGL	.0	
BNA'S IN WATER BY GC/MS	ANAPNE	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.700 UGL	.0	
BNA'S IN WATER BY GC/MS	ANAPNE	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.700 UGL	.0	
BNA'S IN WATER BY GC/MS	ANAPYL	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	0.500 UGL	.0	
BNA'S IN WATER BY GC/MS	ANAPYL	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	0.500 UGL	.0	
BNA'S IN WATER BY GC/MS	ANTRC	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	0.500 UGL	.0	
BNA'S IN WATER BY GC/MS	ANTRC	MKG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	0.500 UGL	.0	
BNA'S IN WATER BY GC/MS	B2CEXM	MKG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.500 UGL	.0	

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	B2CEXM	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	5.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	5.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2EHP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2EHP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAANTR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAANTR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	5.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	5.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBZP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBZP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	10.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	10.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOZ	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	13.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOZ	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	13.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BGHIPI	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	6.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BGHIPI	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	6.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	0.870 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	0.870 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	0.720 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	0.720 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	0.500 UGL	.0

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Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	CHRY	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	2.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CHRY	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	2.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	6.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	6.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	15.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	15.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	7.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	7.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	<	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	<	8.000 UGL	.0

Table F9
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USATHAWA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	ESFS04	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	ESFS04	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	FANT	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	3.300 UGL	.0
BNA'S IN WATER BY GC/MS	FANT	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	3.300 UGL	.0
BNA'S IN WATER BY GC/MS	FLRENE	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	FLRENE	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	GCLDAN	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	GCLDAN	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	HCB0	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	HCB0	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	HPCL	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	HPCL	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	HPCLE	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	5.000 UGL	.0
BNA'S IN WATER BY GC/MS	HPCLE	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	5.000 UGL	.0
BNA'S IN WATER BY GC/MS	ICDPYR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	ICDPYR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	ISOPHR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	4.800 UGL	.0
BNA'S IN WATER BY GC/MS	ISOPHR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	4.800 UGL	.0
BNA'S IN WATER BY GC/MS	LIN	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	LIN	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	MEXCLR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	MEXCLR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	NAP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	NAP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	NB	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	NB	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	NNDMEA	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	NNDMEA	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	NNDNPA	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	4.400 UGL	.0
BNA'S IN WATER BY GC/MS	NNDNPA	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	4.400 UGL	.0
BNA'S IN WATER BY GC/MS	NNDPA	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	3.000 UGL	.0

Table F9
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	NINDPA	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 3.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB221	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB221	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB232	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB232	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 18.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 18.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDD	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDD	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDE	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDE	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDT	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDT	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PYR	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 2.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PYR	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 2.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	TXPHEN	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	TXPHEN	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	< 36.000 UGL	.0

Table F9
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USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN WATER BY GC/MS	11TCE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	11TCE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	11TCE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	1.200 UGL	.0
VOC'S IN WATER BY GC/MS	11TCE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	1.200 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.680 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.680 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCLP	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCLP	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	2CLEVE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.710 UGL	.0
VOC'S IN WATER BY GC/MS	2CLEVE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.710 UGL	.0
VOC'S IN WATER BY GC/MS	ACET	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	13.000 UGL	.0
VOC'S IN WATER BY GC/MS	ACET	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	13.000 UGL	.0
VOC'S IN WATER BY GC/MS	ACROLN	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	ACROLN	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	ACRYLO	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	ACRYLO	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	BRDCLM	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.590 UGL	.0
VOC'S IN WATER BY GC/MS	BRDCLM	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.590 UGL	.0
VOC'S IN WATER BY GC/MS	C13DCP	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	C13DCP	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	C2AVE	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	8.300 UGL	.0
VOC'S IN WATER BY GC/MS	C2AVE	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	8.300 UGL	.0
VOC'S IN WATER BY GC/MS	C2H3CL	MKG303X1	ZPR	28-JUL-1992	03-AUG-1992	<	2.600 UGL	.0
VOC'S IN WATER BY GC/MS	C2H5CL	MKG303X1	ZPR	29-JUL-1992	03-AUG-1992	<	2.600 UGL	.0

Table F9
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USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN WATER BY GC/MS	C2H5CL	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	1.900 UGL	.0
VOC'S IN WATER BY GC/MS	C2H5CL	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	1.900 UGL	.0
VOC'S IN WATER BY GC/MS	C6H6	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	C6H6	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	CCL3F	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	1.400 UGL	.0
VOC'S IN WATER BY GC/MS	CCL3F	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	1.400 UGL	.0
VOC'S IN WATER BY GC/MS	CCL4	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	CCL4	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	CH2CL2	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	2.300 UGL	.0
VOC'S IN WATER BY GC/MS	CH2CL2	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	2.300 UGL	.0
VOC'S IN WATER BY GC/MS	CH3BR	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	5.800 UGL	.0
VOC'S IN WATER BY GC/MS	CH3BR	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	5.800 UGL	.0
VOC'S IN WATER BY GC/MS	CH3CL	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	3.200 UGL	.0
VOC'S IN WATER BY GC/MS	CH3CL	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	3.200 UGL	.0
VOC'S IN WATER BY GC/MS	CHBR3	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	2.600 UGL	.0
VOC'S IN WATER BY GC/MS	CHBR3	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	2.600 UGL	.0
VOC'S IN WATER BY GC/MS	CHCL3	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	CHCL3	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	CL2B2	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	10.000 UGL	.0
VOC'S IN WATER BY GC/MS	CL2B2	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	10.000 UGL	.0
VOC'S IN WATER BY GC/MS	CLC6H5	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	CLC6H5	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	CS2	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	CS2	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	DBRCLM	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.670 UGL	.0
VOC'S IN WATER BY GC/MS	DBRCLM	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.670 UGL	.0
VOC'S IN WATER BY GC/MS	ETC6H5	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	ETC6H5	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	MEC6H5	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	MEC6H5	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN WATER BY GC/MS	UM20	MEK	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	6.400 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEK	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	6.400 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	3.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	3.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MNBK	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	3.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MNBK	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	3.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	STYR	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	STYR	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	T13DCP	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.700 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	T13DCP	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.700 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEA	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.510 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEA	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.510 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEE	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	1.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEE	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	1.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TRCLE	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TRCLE	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	XYLEN	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	0.840 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	XYLEN	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	0.840 UGL	.0

Table F11
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Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
	00	ALK	WDG507XX	AGZ	18-JUN-1992	30-JUN-1992		35000.000	UGL	12.1
	00	ALK	WKG507XX	AGZ	18-JUN-1992	30-JUN-1992		31000.000	UGL	12.1
	00	HARD	MDMW13X1	ALE	20-JUL-1992	28-JUL-1992		22000.000	UGL	20.0
	00	HARD	MDMW13X1	ALE	20-JUL-1992	28-JUL-1992		18000.000	UGL	20.0
	00	HARD	WDG507XX	ZON	18-JUN-1992	30-JUN-1992		40600.000	UGL	.0
	00	HARD	WKG507XX	ZON	18-JUN-1992	30-JUN-1992		40600.000	UGL	.0
	00	TOC	D0G50500	ZWY	18-JUN-1992	11-JUL-1992		13200.000	UGG	44.8
	00	TOC	DKG50500	ZHK	18-JUN-1992	06-JUL-1992		8370.000	UGG	44.8
	00	TPHC	21S-92-0	AGT	09-JUL-1992	30-JUL-1992		1490.000	UGG	12.9
	00	TPHC	21S-92-0	AGT	09-JUL-1992	30-JUL-1992		1310.000	UGG	12.9
	00	TPHC	DXG50500	ZOX	18-JUN-1992	09-JUL-1992		359.000	UGG	57.8
	00	TPHC	D0G50500	ZOX	18-JUN-1992	09-JUL-1992		198.000	UGG	57.8
	00	TPHC	ED090208	AGT	07-JUL-1992	30-JUL-1992		5300.000	UGG	1.9
	00	TPHC	EX090208	AGT	07-JUL-1992	30-JUL-1992		5200.000	UGG	1.9
	00	TPHC	MDMW13X1	ALN	20-JUL-1992	07-AUG-1992	<	200.000	UGL	.0
	00	TPHC	MDMW13X1	ALN	20-JUL-1992	07-AUG-1992	<	200.000	UGL	.0
	00	TPHC	WDG507XX	ZNA	18-JUN-1992	08-JUL-1992	<	1600.000	UGL	.0
	00	TPHC	WKG507XX	ZNA	18-JUN-1992	08-JUL-1992	<	1600.000	UGL	.0
	00	TSS	MDMW13X1	AGP	20-JUL-1992	23-JUL-1992		199000.000	UGL	147.6
	00	TSS	MDMW13X1	AGP	20-JUL-1992	23-JUL-1992		30000.000	UGL	147.6
	00	TSS	WKG507XX	ZOF	18-JUN-1992	22-JUN-1992		17000.000	UGL	83.3
	00	TSS	WKG507XX	ZOF	18-JUN-1992	22-JUN-1992		7000.000	UGL	83.3
	99	ALK	MDMW13X1	AGI	20-JUL-1992	29-JUL-1992		14000.000	UGL	33.3
	99	ALK	MDMW13X1	AGI	20-JUL-1992	29-JUL-1992		10000.000	UGL	33.3
	99	HCO3	MDMW13X1	AGI	20-JUL-1992	29-JUL-1992		17100.000	UGL	33.4
	99	HCO3	MDMW13X1	AGI	20-JUL-1992	29-JUL-1992		12200.000	UGL	33.4
	JB01	HG	21S-92-0	ZQP	09-JUL-1992	27-JUL-1992		7.700	UGG	26.5
	JB01	HG	21S-92-0	ZQP	09-JUL-1992	27-JUL-1992		5.900	UGG	26.5
	JB01	HG	D0G50500	ZQF	18-JUN-1992	13-JUL-1992		0.461	UGG	21.9
	JB01	HG	DXG50500	ZQF	18-JUN-1992	13-JUL-1992		0.370	UGG	21.9
	JB01	HG	EX090208	ZQO	07-JUL-1992	21-JUL-1992		0.176	UGG	34.7
	JB01	HG	ED090208	ZQO	07-JUL-1992	21-JUL-1992		0.124	UGG	34.7
SE IN SOIL BY GFAA	JD15	SE	21S-92-0	ZSL	09-JUL-1992	05-AUG-1992		1.180	UGG	5.2
SE IN SOIL BY GFAA	JD15	SE	21S-92-0	ZSL	09-JUL-1992	05-AUG-1992		1.120	UGG	5.2
SE IN SOIL BY GFAA	JD15	SE	DXG50500	ZSA	18-JUN-1992	17-JUL-1992	<	0.250	UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
SE IN SOIL BY GFAA	JD15	SE	D0G50500	ZSA	18-JUN-1992	17-JUL-1992	< 0.250 UGG	.0
SE IN SOIL BY GFAA	JD15	SE	ED090208	ZSL	07-JUL-1992	05-AUG-1992	< 0.250 UGG	.0
SE IN SOIL BY GFAA	JD15	SE	EX090208	ZSL	07-JUL-1992	05-AUG-1992	< 0.250 UGG	.0
PB IN SOIL BY GFAA	JD17	PB	21S-92-0	ZXF	09-JUL-1992	06-AUG-1992	140.000 UGG	7.4
PB IN SOIL BY GFAA	JD17	PB	21S-92-0	ZXF	09-JUL-1992	06-AUG-1992	130.000 UGG	7.4
PB IN SOIL BY GFAA	JD17	PB	D0G50500	ZAT	18-JUN-1992	17-JUL-1992	88.000 UGG	18.6
PB IN SOIL BY GFAA	JD17	PB	D0G50500	ZAT	18-JUN-1992	17-JUL-1992	73.000 UGG	18.6
PB IN SOIL BY GFAA	JD17	PB	EX090208	ZXF	07-JUL-1992	06-AUG-1992	260.000 UGG	31.1
PB IN SOIL BY GFAA	JD17	PB	ED090208	ZXF	07-JUL-1992	06-AUG-1992	190.000 UGG	31.1
AS IN SOIL BY GFAA	JD19	AS	21S-92-0	ZIX	09-JUL-1992	06-AUG-1992	30.000 UGG	107.8
AS IN SOIL BY GFAA	JD19	AS	21S-92-0	ZIX	09-JUL-1992	06-AUG-1992	8.990 UGG	107.8
AS IN SOIL BY GFAA	JD19	AS	D0G50500	ZIK	18-JUN-1992	28-JUL-1992	4.700 UGG	2.8
AS IN SOIL BY GFAA	JD19	AS	D0G50500	ZIK	18-JUN-1992	28-JUL-1992	4.570 UGG	2.8
AS IN SOIL BY GFAA	JD19	AS	EX090208	ZIX	07-JUL-1992	06-AUG-1992	17.000 UGG	28.2
AS IN SOIL BY GFAA	JD19	AS	ED090208	ZIX	07-JUL-1992	06-AUG-1992	12.800 UGG	28.2
TL IN SOIL BY GFAA	JD24	TL	21S-92-0	ZLE	09-JUL-1992	06-AUG-1992	< 0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	21S-92-0	ZLE	09-JUL-1992	06-AUG-1992	< 0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	D0G50500	ZLC	18-JUN-1992	20-JUL-1992	< 0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	D0G50500	ZLC	18-JUN-1992	20-JUL-1992	< 0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	ED090208	ZLE	07-JUL-1992	06-AUG-1992	< 0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	EX090208	ZLE	07-JUL-1992	06-AUG-1992	< 0.500 UGG	.0
SB IN SOIL BY GFAA	JD25	SB	21S-92-0	ZME	09-JUL-1992	06-AUG-1992	3.220 UGG	11.8
SB IN SOIL BY GFAA	JD25	SB	21S-92-0	ZME	09-JUL-1992	06-AUG-1992	2.860 UGG	11.8
SB IN SOIL BY GFAA	JD25	SB	D0G50500	ZMC	18-JUN-1992	24-JUL-1992	8.510 UGG	16.8
SB IN SOIL BY GFAA	JD25	SB	D0G50500	ZMC	18-JUN-1992	24-JUL-1992	7.190 UGG	16.8
SB IN SOIL BY GFAA	JD25	SB	ED090208	ZME	07-JUL-1992	06-AUG-1992	3.030 UGG	94.2
SB IN SOIL BY GFAA	JD25	SB	EX090208	ZME	07-JUL-1992	06-AUG-1992	1.090 UGG	94.2
METALS IN SOIL BY ICAP	JS16	AG	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	46.000 UGG	19.0
METALS IN SOIL BY ICAP	JS16	AG	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	38.000 UGG	19.0
METALS IN SOIL BY ICAP	JS16	AG	D0G50500	ZJG	18-JUN-1992	08-JUL-1992	1.690 UGG	.6
METALS IN SOIL BY ICAP	JS16	AG	D0G50500	ZJG	18-JUN-1992	08-JUL-1992	1.680 UGG	.6
METALS IN SOIL BY ICAP	JS16	AG	ED090208	ZJP	07-JUL-1992	23-JUL-1992	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	EX090208	ZJP	07-JUL-1992	23-JUL-1992	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AL	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	6130.000 UGG	14.5
METALS IN SOIL BY ICAP	JS16	AL	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	5300.000 UGG	14.5

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
METALS IN SOIL BY ICAP	JS16	AL	DXG50500	ZJG	18-JUN-1992	08-JUL-1992		4750.000 UGG	5.9
METALS IN SOIL BY ICAP	JS16	AL	DOG50500	ZJG	18-JUN-1992	08-JUL-1992		4480.000 UGG	5.9
METALS IN SOIL BY ICAP	JS16	AL	ED090208	ZJP	07-JUL-1992	23-JUL-1992		8660.000 UGG	8.7
METALS IN SOIL BY ICAP	JS16	AL	EX090208	ZJP	07-JUL-1992	23-JUL-1992		7940.000 UGG	8.7
METALS IN SOIL BY ICAP	JS16	BA	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		460.000 UGG	47.6
METALS IN SOIL BY ICAP	JS16	BA	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		283.000 UGG	47.6
METALS IN SOIL BY ICAP	JS16	BA	DOG50500	ZJG	18-JUN-1992	08-JUL-1992		63.700 UGG	5.0
METALS IN SOIL BY ICAP	JS16	BA	DXG50500	ZJG	18-JUN-1992	08-JUL-1992		60.600 UGG	5.0
METALS IN SOIL BY ICAP	JS16	BA	ED090208	ZJP	07-JUL-1992	23-JUL-1992		71.800 UGG	11.2
METALS IN SOIL BY ICAP	JS16	BA	EX090208	ZJP	07-JUL-1992	23-JUL-1992		64.200 UGG	11.2
METALS IN SOIL BY ICAP	JS16	BE	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	<	0.500 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	<	0.500 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	<	0.500 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	DOG50500	ZJG	18-JUN-1992	08-JUL-1992	<	0.500 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	ED090208	ZJP	07-JUL-1992	23-JUL-1992		1.000 UGG	7.7
METALS IN SOIL BY ICAP	JS16	BE	EX090208	ZJP	07-JUL-1992	23-JUL-1992		0.926 UGG	7.7
METALS IN SOIL BY ICAP	JS16	CA	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		3980.000 UGG	20.8
METALS IN SOIL BY ICAP	JS16	CA	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		3230.000 UGG	20.8
METALS IN SOIL BY ICAP	JS16	CA	DOG50500	ZJG	18-JUN-1992	08-JUL-1992		891.000 UGG	5.9
METALS IN SOIL BY ICAP	JS16	CA	DXG50500	ZJG	18-JUN-1992	08-JUL-1992		840.000 UGG	5.9
METALS IN SOIL BY ICAP	JS16	CA	EX090208	ZJP	07-JUL-1992	23-JUL-1992		7500.000 UGG	30.8
METALS IN SOIL BY ICAP	JS16	CA	ED090208	ZJP	07-JUL-1992	23-JUL-1992		5500.000 UGG	30.8
METALS IN SOIL BY ICAP	JS16	CD	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		3.140 UGG	70.1
METALS IN SOIL BY ICAP	JS16	CD	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		1.510 UGG	70.1
METALS IN SOIL BY ICAP	JS16	CD	DXG50500	ZJG	18-JUN-1992	08-JUL-1992		10.600 UGG	11.4
METALS IN SOIL BY ICAP	JS16	CD	DOG50500	ZJG	18-JUN-1992	08-JUL-1992		9.460 UGG	11.4
METALS IN SOIL BY ICAP	JS16	CD	EX090208	ZJP	07-JUL-1992	23-JUL-1992		1.650 UGG	80.9
METALS IN SOIL BY ICAP	JS16	CD	ED090208	ZJP	07-JUL-1992	23-JUL-1992	<	0.700 UGG	80.9
METALS IN SOIL BY ICAP	JS16	CO	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		5.350 UGG	.0
METALS IN SOIL BY ICAP	JS16	CO	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		5.350 UGG	.0
METALS IN SOIL BY ICAP	JS16	CO	DOG50500	ZJG	18-JUN-1992	08-JUL-1992		3.130 UGG	.6
METALS IN SOIL BY ICAP	JS16	CO	DXG50500	ZJG	18-JUN-1992	08-JUL-1992		3.110 UGG	.6
METALS IN SOIL BY ICAP	JS16	CO	ED090208	ZJP	07-JUL-1992	23-JUL-1992		5.770 UGG	2.3
METALS IN SOIL BY ICAP	JS16	CO	EX090208	ZJP	07-JUL-1992	23-JUL-1992		5.640 UGG	2.3
METALS IN SOIL BY ICAP	JS16	CR	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		37.500 UGG	23.9
METALS IN SOIL BY ICAP	JS16	CR	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992		29.500 UGG	23.9
METALS IN SOIL BY ICAP	JS16	CR	DOG50500	ZJG	18-JUN-1992	08-JUL-1992		63.300 UGG	14.4
METALS IN SOIL BY ICAP	JS16	CR	DXG50500	ZJG	18-JUN-1992	08-JUL-1992		54.800 UGG	14.4
METALS IN SOIL BY ICAP	JS16	CR	ED090208	ZJP	07-JUL-1992	23-JUL-1992		31.400 UGG	4.6
METALS IN SOIL BY ICAP	JS16	CR	EX090208	ZJP	07-JUL-1992	23-JUL-1992		30.000 UGG	4.6

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
METALS IN SOIL BY ICAP	JS16	CU	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	295.000 UGG	19.7
METALS IN SOIL BY ICAP	JS16	CU	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	242.000 UGG	19.7
METALS IN SOIL BY ICAP	JS16	CU	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	62.800 UGG	31.9
METALS IN SOIL BY ICAP	JS16	CU	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	45.500 UGG	31.9
METALS IN SOIL BY ICAP	JS16	CU	EX090208	ZJP	07-JUL-1992	23-JUL-1992	28.500 UGG	33.1
METALS IN SOIL BY ICAP	JS16	CU	EX090208	ZJP	07-JUL-1992	23-JUL-1992	20.400 UGG	33.1
METALS IN SOIL BY ICAP	JS16	FE	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	12200.000 UGG	12.2
METALS IN SOIL BY ICAP	JS16	FE	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	10800.000 UGG	12.2
METALS IN SOIL BY ICAP	JS16	FE	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	5710.000 UGG	2.3
METALS IN SOIL BY ICAP	JS16	FE	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	5580.000 UGG	2.3
METALS IN SOIL BY ICAP	JS16	FE	EX090208	ZJP	07-JUL-1992	23-JUL-1992	13700.000 UGG	2.2
METALS IN SOIL BY ICAP	JS16	FE	EX090208	ZJP	07-JUL-1992	23-JUL-1992	13400.000 UGG	2.2
METALS IN SOIL BY ICAP	JS16	K	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	392.000 UGG	8.8
METALS IN SOIL BY ICAP	JS16	K	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	359.000 UGG	8.8
METALS IN SOIL BY ICAP	JS16	K	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	551.000 UGG	23.1
METALS IN SOIL BY ICAP	JS16	K	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	437.000 UGG	23.1
METALS IN SOIL BY ICAP	JS16	K	EX090208	ZJP	07-JUL-1992	23-JUL-1992	1070.000 UGG	59.9
METALS IN SOIL BY ICAP	JS16	K	EX090208	ZJP	07-JUL-1992	23-JUL-1992	577.000 UGG	59.9
METALS IN SOIL BY ICAP	JS16	MG	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	2770.000 UGG	10.2
METALS IN SOIL BY ICAP	JS16	MG	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	2500.000 UGG	10.2
METALS IN SOIL BY ICAP	JS16	MG	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	1380.000 UGG	9.9
METALS IN SOIL BY ICAP	JS16	MG	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	1250.000 UGG	9.9
METALS IN SOIL BY ICAP	JS16	MG	EX090208	ZJP	07-JUL-1992	23-JUL-1992	4360.000 UGG	19.4
METALS IN SOIL BY ICAP	JS16	MG	EX090208	ZJP	07-JUL-1992	23-JUL-1992	3590.000 UGG	19.4
METALS IN SOIL BY ICAP	JS16	MN	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	280.000 UGG	54.0
METALS IN SOIL BY ICAP	JS16	MN	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	161.000 UGG	54.0
METALS IN SOIL BY ICAP	JS16	MN	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	109.000 UGG	7.6
METALS IN SOIL BY ICAP	JS16	MN	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	101.000 UGG	7.6
METALS IN SOIL BY ICAP	JS16	MN	EX090208	ZJP	07-JUL-1992	23-JUL-1992	177.000 UGG	3.4
METALS IN SOIL BY ICAP	JS16	MN	EX090208	ZJP	07-JUL-1992	23-JUL-1992	171.000 UGG	3.4
METALS IN SOIL BY ICAP	JS16	NA	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	244.000 UGG	2.5
METALS IN SOIL BY ICAP	JS16	NA	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	238.000 UGG	2.5
METALS IN SOIL BY ICAP	JS16	NA	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	247.000 UGG	84.7
METALS IN SOIL BY ICAP	JS16	NA	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	100.000 UGG	84.7
METALS IN SOIL BY ICAP	JS16	NA	EX090208	ZJP	07-JUL-1992	23-JUL-1992	291.000 UGG	35.2
METALS IN SOIL BY ICAP	JS16	NA	EX090208	ZJP	07-JUL-1992	23-JUL-1992	204.000 UGG	35.2
METALS IN SOIL BY ICAP	JS16	NI	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	18.300 UGG	43.2
METALS IN SOIL BY ICAP	JS16	NI	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	11.800 UGG	43.2
METALS IN SOIL BY ICAP	JS16	NI	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	10.500 UGG	5.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
METALS IN SOIL BY ICAP	JS16	NI	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	9.990	UGG	5.0
METALS IN SOIL BY ICAP	JS16	NI	ED090208	ZJP	07-JUL-1992	23-JUL-1992	23.600	UGG	1.7
METALS IN SOIL BY ICAP	JS16	NI	EX090208	ZJP	07-JUL-1992	23-JUL-1992	23.200	UGG	1.7
METALS IN SOIL BY ICAP	JS16	V	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	17.000	UGG	6.7
METALS IN SOIL BY ICAP	JS16	V	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	15.900	UGG	6.7
METALS IN SOIL BY ICAP	JS16	V	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	9.330	UGG	3.2
METALS IN SOIL BY ICAP	JS16	V	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	9.040	UGG	3.2
METALS IN SOIL BY ICAP	JS16	V	ED090208	ZJP	07-JUL-1992	23-JUL-1992	22.200	UGG	5.6
METALS IN SOIL BY ICAP	JS16	V	EX090208	ZJP	07-JUL-1992	23-JUL-1992	21.000	UGG	5.6
METALS IN SOIL BY ICAP	JS16	ZN	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	289.000	UGG	33.1
METALS IN SOIL BY ICAP	JS16	ZN	21S-92-0	ZJP	09-JUL-1992	23-JUL-1992	207.000	UGG	33.1
METALS IN SOIL BY ICAP	JS16	ZN	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	100.000	UGG	3.0
METALS IN SOIL BY ICAP	JS16	ZN	DXG50500	ZJG	18-JUN-1992	08-JUL-1992	97.000	UGG	3.0
METALS IN SOIL BY ICAP	JS16	ZN	ED090208	ZJP	07-JUL-1992	23-JUL-1992	305.000	UGG	11.8
METALS IN SOIL BY ICAP	JS16	ZN	EX090208	ZJP	07-JUL-1992	23-JUL-1992	271.000	UGG	11.8
BNA'S IN SOIL BY GC/MS	LM18	124TCB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	1.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	1.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.200	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.200	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.600	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.600	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	6.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	6.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.500	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.500	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	5.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	5.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.600	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.600	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	6.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	6.000	UGG	.0

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	2.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.490 UGG
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	0.490 UGG
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	5.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	5.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	245TCP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	245TCP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	2.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	245TCP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.500 UGG
BNA'S IN SOIL BY GC/MS	LM18	245TCP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	0.500 UGG
BNA'S IN SOIL BY GC/MS	LM18	245TCP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	5.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	245TCP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	5.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	246TCP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	4.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	246TCP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	4.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	246TCP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.800 UGG
BNA'S IN SOIL BY GC/MS	LM18	246TCP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	0.800 UGG
BNA'S IN SOIL BY GC/MS	LM18	246TCP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	8.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	246TCP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	8.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	4.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	4.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.900 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	0.900 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	9.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	9.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	20.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	20.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	3.450 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	3.450 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	30.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DMPN	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	30.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	30.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	30.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	6.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	6.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	60.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	60.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	24DNT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	4.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	4.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	24DNT	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.700 UGG

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

USATHAWA		IRDMIS		Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Sample Number	Test Name						
Method Description									
BNAS IN SOIL BY GC/MS	24ONT	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.700	UGG	.0
BNAS IN SOIL BY GC/MS	24ONT	ED090208	ZNF	07-JUL-1992	28-JUL-1992	<	7.000	UGG	.0
BNAS IN SOIL BY GC/MS	24ONT	EX090208	ZNF	07-JUL-1992	28-JUL-1992	<	7.000	UGG	.0
BNAS IN SOIL BY GC/MS	26ONT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	26ONT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	26ONT	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.425	UGG	.0
BNAS IN SOIL BY GC/MS	26ONT	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.425	UGG	.0
BNAS IN SOIL BY GC/MS	26ONT	ED090208	ZNF	07-JUL-1992	28-JUL-1992	<	4.000	UGG	.0
BNAS IN SOIL BY GC/MS	26ONT	EX090208	ZNF	07-JUL-1992	28-JUL-1992	<	4.000	UGG	.0
BNAS IN SOIL BY GC/MS	2CLP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2CLP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2CLP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.300	UGG	.0
BNAS IN SOIL BY GC/MS	2CLP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.300	UGG	.0
BNAS IN SOIL BY GC/MS	2CLP	ED090208	ZNF	07-JUL-1992	28-JUL-1992	<	3.000	UGG	.0
BNAS IN SOIL BY GC/MS	2CLP	EX090208	ZNF	07-JUL-1992	28-JUL-1992	<	3.000	UGG	.0
BNAS IN SOIL BY GC/MS	2CNAP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.900	UGG	.0
BNAS IN SOIL BY GC/MS	2CNAP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.900	UGG	.0
BNAS IN SOIL BY GC/MS	2CNAP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.180	UGG	.0
BNAS IN SOIL BY GC/MS	2CNAP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.180	UGG	.0
BNAS IN SOIL BY GC/MS	2CNAP	ED090208	ZNF	07-JUL-1992	28-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2CNAP	EX090208	ZNF	07-JUL-1992	28-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2MNAP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	1.000	UGG	.0
BNAS IN SOIL BY GC/MS	2MNAP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	1.000	UGG	.0
BNAS IN SOIL BY GC/MS	2MNAP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.245	UGG	.0
BNAS IN SOIL BY GC/MS	2MNAP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.245	UGG	.0
BNAS IN SOIL BY GC/MS	2MNAP	ED090208	ZNF	07-JUL-1992	28-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2MNAP	EX090208	ZNF	07-JUL-1992	28-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2MP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.700	UGG	.0
BNAS IN SOIL BY GC/MS	2MP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.700	UGG	.0
BNAS IN SOIL BY GC/MS	2MP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.145	UGG	.0
BNAS IN SOIL BY GC/MS	2MP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.145	UGG	.0
BNAS IN SOIL BY GC/MS	2MP	ED090208	ZNF	07-JUL-1992	28-JUL-1992	<	1.000	UGG	.0
BNAS IN SOIL BY GC/MS	2MP	EX090208	ZNF	07-JUL-1992	28-JUL-1992	<	1.000	UGG	.0
BNAS IN SOIL BY GC/MS	2NANIL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2NANIL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2.000	UGG	.0
BNAS IN SOIL BY GC/MS	2NANIL	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.310	UGG	.0
BNAS IN SOIL BY GC/MS	2NANIL	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.310	UGG	.0
BNAS IN SOIL BY GC/MS	2NANIL	ED090208	ZNF	07-JUL-1992	28-JUL-1992	<	3.000	UGG	.0
BNAS IN SOIL BY GC/MS	2NANIL	EX090208	ZNF	07-JUL-1992	28-JUL-1992	<	3.000	UGG	.0

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	2NP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	0.700 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	0.700 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	7.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	2NP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	7.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	31.500 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	31.500 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	300.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	33DCBD	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	300.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	2.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	2.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	3NANIL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46N2C	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46N2C	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46N2C	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	2.750 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46N2C	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	2.750 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46N2C	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	46N2C	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	4.050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	4.050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	40.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	40.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	0.475 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	0.475 UGG	.0

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAWA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	< 5,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 5,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 6,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 6,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 1,200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 1,200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	< 10,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 10,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 10,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 2,050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 2,050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	< 20,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 20,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 40,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 40,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 7,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 7,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	< 70,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 70,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 8,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 8,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	< 20,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 20,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 8,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 8,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	< 2,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	< 20,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 20,000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	< 20,000 UGG	.0

Table F11
Sample Duplicate Quality Control Report
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.900 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.900 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.180 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.180 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.295 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.295 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	1.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0

Table F11
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Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	< 10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	3.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	3.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	4.000 UGG	.0

Table F11
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	BBZP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	40.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	40.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	300.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	300.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	1.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	1.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	100.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	100.000 UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBAZ	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL68Z	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL68Z	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL68Z	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL68Z	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL68Z	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL68Z	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	31.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	31.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	300.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	300.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	4.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	1.050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	1.050 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2.000 UGG	.0

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	DBHC	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDN	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DMP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	DNBP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0

Table F11
Sample Duplicate Quality Control Report
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	10,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	10,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	10,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	10,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	10,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	10,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	20,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	3,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	3,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	30,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	30,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	1,680 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.855 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	3,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	3,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.800 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	0.800 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.165 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	0.165 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	8,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	8,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<	2,000 UGG

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAWA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.150 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.150 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HCBD	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.500 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.500 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	HPCL	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	7.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	7.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.450 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	1.450 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	0.165 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	8.000 UGG	.0

Table F11
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDPA	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	.0

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USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	PCB016	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB221	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB221	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB221	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB221	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB221	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB221	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB232	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB232	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB232	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB232	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB232	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB232	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB242	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB242	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB242	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB242	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	5.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB242	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB242	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB248	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB248	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB248	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB248	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB248	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	100.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB248	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	100.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB254	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB254	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	50.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB254	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB254	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	10.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB254	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	100.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB254	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	100.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB260	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	80.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB260	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	80.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB260	DDG50500	ZNF	18-JUN-1992	09-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB260	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB260	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCB260	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	200.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	30.000 UGG	.0
BNA'S IN SOIL BY GC/MS	PCP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	30.000 UGG	.0

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USATHAMA		IRDMIS		Test		Method Description	Method Code	Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
Method	Name	Sample	Test	Number	Name								
BNA'S IN SOIL BY GC/MS	LM18	PCP	PCP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	PCP	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	PCP	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<				60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	PCP	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<				60.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	PHANTR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	PHANTR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	PHANTR	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				0.609 UGG	47.6
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	PHANTR	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				0.375 UGG	47.6
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	PHANTR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	PHANTR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	PHENOL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	PHENOL	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				3.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	PHENOL	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	PHENOL	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				0.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	PHENOL	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<				6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	PHENOL	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<				6.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDD	PPDD	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDD	PPDD	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDD	PPDD	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDD	PPDD	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDD	PPDD	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<				20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDD	PPDD	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<				20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDE	PPDE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDE	PPDE	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDE	PPDE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDE	PPDE	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDE	PPDE	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<				20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDE	PPDE	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<				20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	PPDDT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	PPDDT	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				8.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	PPDDT	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	PPDDT	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	PPDDT	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<				20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	PPDDT	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<				20.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	PYR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	PYR	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<				0.800 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	PYR	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				1.720 UGG	65.3
BNA'S IN SOIL BY GC/MS	LM18	PYR	PYR	D0G50500	ZNF	18-JUN-1992	09-JUL-1992	<				0.873 UGG	65.3
BNA'S IN SOIL BY GC/MS	LM18	PYR	PYR	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<				2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	PYR	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<				2.000 UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	80.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	<	80.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	20.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	DXG50500	ZNF	18-JUN-1992	09-JUL-1992	<	20.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	ED090208	ZNQ	07-JUL-1992	28-JUL-1992	<	200.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	EX090208	ZNQ	07-JUL-1992	28-JUL-1992	<	200.000	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	UNK583	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		2.910	UGG	65.8
BNA'S IN SOIL BY GC/MS	LM18	UNK583	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		1.470	UGG	65.8
BNA'S IN SOIL BY GC/MS	LM18	UNK614	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		14.500	UGG	65.2
BNA'S IN SOIL BY GC/MS	LM18	UNK614	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		7.370	UGG	65.2
BNA'S IN SOIL BY GC/MS	LM18	UNK643	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		7.270	UGG	48.8
BNA'S IN SOIL BY GC/MS	LM18	UNK643	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		4.420	UGG	48.8
BNA'S IN SOIL BY GC/MS	LM18	UNK648	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		14.500	UGG	132.4
BNA'S IN SOIL BY GC/MS	LM18	UNK648	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		2.950	UGG	132.4
BNA'S IN SOIL BY GC/MS	LM18	UNK656	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		43.600	UGG	152.3
BNA'S IN SOIL BY GC/MS	LM18	UNK656	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		5.900	UGG	152.3
BNA'S IN SOIL BY GC/MS	LM18	UNK667	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		29.100	UGG	163.2
BNA'S IN SOIL BY GC/MS	LM18	UNK667	DXG50500	ZNF	18-JUN-1992	09-JUL-1992		2.950	UGG	163.2
VOC'S IN SOIL BY GC/MS	LM19	111TCE	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.005	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.005	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.005	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.005	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.004	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.002	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.002	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.002	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.002	UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	12DCE	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.039 UGG	10.8
VOC'S IN SOIL BY GC/MS	LM19	ACET	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.035 UGG	10.8
VOC'S IN SOIL BY GC/MS	LM19	ACET	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0

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USATHAMA Method Code	Method Description	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
LM19	VOC'S IN SOIL BY GC/MS	C2AVE	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2AVE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2AVE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2AVE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H3CL	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H3CL	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H3CL	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H3CL	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H5CL	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H5CL	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H5CL	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C2H5CL	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C6H6	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.002 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C6H6	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.002 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C6H6	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.002 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	C6H6	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.002 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL3F	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL3F	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL3F	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL3F	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL4	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.007 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL4	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.007 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL4	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.007 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CCL4	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.007 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH2CL2	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH2CL2	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH2CL2	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH2CL2	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.012 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3BR	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3BR	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3BR	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3BR	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.006 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3CL	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.009 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3CL	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.009 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3CL	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.009 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CH3CL	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.009 UGG	.0
LM19	VOC'S IN SOIL BY GC/MS	CHBR3	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.007 UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units		RPD
							<	<	
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MTBK	DXG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MTBK	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.027 UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	MIBK	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	DDG50500	YSZ	18-JUN-1992	26-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	DXG50500	YSZ	18-JUN-1992	25-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	ED090208	ZTR	07-JUL-1992	19-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	EX090208	ZTN	07-JUL-1992	17-JUL-1992	<	0.002 UGG	.0
EXPL.S IN SOIL BY HPLC	LM12	135TNB	DDG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.488 UGG	.0
EXPL.S IN SOIL BY HPLC	LM12	135TNB	DXG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.488 UGG	.0
EXPL.S IN SOIL BY HPLC	LM12	13DNB	DDG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.496 UGG	.0
EXPL.S IN SOIL BY HPLC	LM12	13DNB	DXG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.496 UGG	.0
EXPL.S IN SOIL BY HPLC	LM12	246TNT	DDG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.456 UGG	.0

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USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Description								
EXPL.S IN SOIL BY HPLC	246TNT	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.456 UGG	.0
EXPL.S IN SOIL BY HPLC	24DNT	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.424 UGG	.0
EXPL.S IN SOIL BY HPLC	24DNT	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.424 UGG	.0
EXPL.S IN SOIL BY HPLC	26DNT	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.524 UGG	.0
EXPL.S IN SOIL BY HPLC	26DNT	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.524 UGG	.0
EXPL.S IN SOIL BY HPLC	HMX	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.666 UGG	.0
EXPL.S IN SOIL BY HPLC	HMX	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.666 UGG	.0
EXPL.S IN SOIL BY HPLC	NB	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	2.410 UGG	.0
EXPL.S IN SOIL BY HPLC	NB	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	2.410 UGG	.0
EXPL.S IN SOIL BY HPLC	NG	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	4.000 UGG	.0
EXPL.S IN SOIL BY HPLC	NG	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	4.000 UGG	.0
EXPL.S IN SOIL BY HPLC	PETN	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	4.000 UGG	.0
EXPL.S IN SOIL BY HPLC	PETN	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	4.000 UGG	.0
EXPL.S IN SOIL BY HPLC	RDX	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.587 UGG	.0
EXPL.S IN SOIL BY HPLC	RDX	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.587 UGG	.0
EXPL.S IN SOIL BY HPLC	TETRYL	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.731 UGG	.0
EXPL.S IN SOIL BY HPLC	TETRYL	DYG50500	ZHK	18-JUN-1992	04-JUL-1992	<	0.731 UGG	.0
HG IN WATER BY CVAA	SB01	MMW13X1	YVW	20-JUL-1992	05-AUG-1992	<	1.310 UGL	137.4
HG IN WATER BY CVAA	SB01	MMW13X1	YVW	20-JUL-1992	05-AUG-1992	<	0.243 UGL	137.4
HG IN WATER BY CVAA	SB01	WXS07XX	YVM	18-JUN-1992	07-JUL-1992	<	0.243 UGL	.0
HG IN WATER BY CVAA	SB01	WXS07XX	YVM	18-JUN-1992	07-JUL-1992	<	0.243 UGL	.0
TL IN WATER BY GFAA	SD09	MMW13X1	ZKH	20-JUL-1992	11-AUG-1992	<	6.990 UGL	.0
TL IN WATER BY GFAA	SD09	MMW13X1	ZKH	20-JUL-1992	11-AUG-1992	<	6.990 UGL	.0
TL IN WATER BY GFAA	SD09	WXS07XX	ZKB	18-JUN-1992	10-JUL-1992	<	6.990 UGL	.0
TL IN WATER BY GFAA	SD09	WXS07XX	ZKB	18-JUN-1992	10-JUL-1992	<	6.990 UGL	.0
PB IN WATER BY GFAA	SD20	MMW13X1	ZUH	20-JUL-1992	07-AUG-1992	<	4.450 UGL	83.0
PB IN WATER BY GFAA	SD20	MMW13X1	ZUH	20-JUL-1992	07-AUG-1992	<	1.840 UGL	83.0
PB IN WATER BY GFAA	SD20	WXS07XX	XMX	18-JUN-1992	15-JUL-1992	<	5.750 UGL	9.9
PB IN WATER BY GFAA	SD20	WXS07XX	XMX	18-JUN-1992	15-JUL-1992	<	5.210 UGL	9.9
SE IN WATER BY GFAA	SD21	MMW13X1	ZGN	20-JUL-1992	11-AUG-1992	<	3.020 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
SE IN WATER BY GFAA	SD21	SE	MDM13X1	ZGN	20-JUL-1992	11-AUG-1992	<	3.020 UGL	.0
SE IN WATER BY GFAA	SD21	SE	WDG507XX	ZGD	18-JUN-1992	10-JUL-1992	<	3.020 UGL	.0
SE IN WATER BY GFAA	SD21	SE	WKG507XX	ZGD	18-JUN-1992	10-JUL-1992	<	3.020 UGL	.0
AS IN WATER BY GFAA	SD22	AS	MDM13X1	AAC	20-JUL-1992	12-AUG-1992		7.570 UGL	81.2
AS IN WATER BY GFAA	SD22	AS	MDM13X1	AAC	20-JUL-1992	12-AUG-1992		3.200 UGL	81.2
AS IN WATER BY GFAA	SD22	AS	WKG507XX	YIS	18-JUN-1992	10-JUL-1992		3.090 UGL	19.5
AS IN WATER BY GFAA	SD22	AS	WDG507XX	YIS	18-JUN-1992	10-JUL-1992	<	2.540 UGL	19.5
SB IN WATER BY GFAA	SD28	SB	MDM13X1	YWF	20-JUL-1992	11-AUG-1992	<	3.030 UGL	.0
SB IN WATER BY GFAA	SD28	SB	MDM13X1	YWF	20-JUL-1992	11-AUG-1992	<	3.030 UGL	.0
SB IN WATER BY GFAA	SD28	SB	WDG507XX	YWB	18-JUN-1992	24-JUL-1992	<	3.030 UGL	.0
SB IN WATER BY GFAA	SD28	SB	WKG507XX	YWB	18-JUN-1992	24-JUL-1992	<	3.030 UGL	.0
METALS IN WATER BY ICAP	SS10	AG	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	4.600 UGL	.0
METALS IN WATER BY ICAP	SS10	AG	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	4.600 UGL	.0
METALS IN WATER BY ICAP	SS10	AG	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	4.600 UGL	.0
METALS IN WATER BY ICAP	SS10	AG	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	4.600 UGL	.0
METALS IN WATER BY ICAP	SS10	AL	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992		5570.000 UGL	154.6
METALS IN WATER BY ICAP	SS10	AL	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992		713.000 UGL	154.6
METALS IN WATER BY ICAP	SS10	AL	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		144.000 UGL	2.1
METALS IN WATER BY ICAP	SS10	AL	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	141.000 UGL	2.1
METALS IN WATER BY ICAP	SS10	BA	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992		28.600 UGL	94.1
METALS IN WATER BY ICAP	SS10	BA	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992		10.300 UGL	94.1
METALS IN WATER BY ICAP	SS10	BA	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		17.900 UGL	4.0
METALS IN WATER BY ICAP	SS10	BA	WKG507XX	YOU	18-JUN-1992	30-JUN-1992		17.200 UGL	4.0
METALS IN WATER BY ICAP	SS10	BE	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	5.000 UGL	.0
METALS IN WATER BY ICAP	SS10	BE	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	5.000 UGL	.0
METALS IN WATER BY ICAP	SS10	BE	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	5.000 UGL	.0
METALS IN WATER BY ICAP	SS10	BE	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	5.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CA	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992		3820.000 UGL	26.7
METALS IN WATER BY ICAP	SS10	CA	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992		2920.000 UGL	26.7
METALS IN WATER BY ICAP	SS10	CA	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		12900.000 UGL	3.1
METALS IN WATER BY ICAP	SS10	CA	WKG507XX	YOU	18-JUN-1992	30-JUN-1992		12500.000 UGL	3.1
METALS IN WATER BY ICAP	SS10	CD	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	4.010 UGL	.0
METALS IN WATER BY ICAP	SS10	CD	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	4.010 UGL	.0
METALS IN WATER BY ICAP	SS10	CD	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	4.010 UGL	.0
METALS IN WATER BY ICAP	SS10	CD	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	4.010 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
METALS IN WATER BY ICAP	SS10	CO	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	<	25.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CO	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	<	25.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CO	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	25.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CO	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	25.000 UGL	.0
METALS IN WATER BY ICAP	SS10	CR	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		13.800 UGL	72.5
METALS IN WATER BY ICAP	SS10	CR	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		6.460 UGL	72.5
METALS IN WATER BY ICAP	SS10	CR	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	6.020 UGL	.0
METALS IN WATER BY ICAP	SS10	CR	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	6.020 UGL	.0
METALS IN WATER BY ICAP	SS10	CU	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		8.980 UGL	10.4
METALS IN WATER BY ICAP	SS10	CU	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	<	8.090 UGL	10.4
METALS IN WATER BY ICAP	SS10	CU	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	8.090 UGL	.0
METALS IN WATER BY ICAP	SS10	CU	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	8.090 UGL	.0
METALS IN WATER BY ICAP	SS10	FE	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		6770.000 UGL	153.7
METALS IN WATER BY ICAP	SS10	FE	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		886.000 UGL	153.7
METALS IN WATER BY ICAP	SS10	FE	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		824.000 UGL	4.7
METALS IN WATER BY ICAP	SS10	FE	WKG507XX	YOU	18-JUN-1992	30-JUN-1992		786.000 UGL	4.7
METALS IN WATER BY ICAP	SS10	K	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		1440.000 UGL	65.9
METALS IN WATER BY ICAP	SS10	K	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		726.000 UGL	65.9
METALS IN WATER BY ICAP	SS10	K	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		2710.000 UGL	5.3
METALS IN WATER BY ICAP	SS10	K	WKG507XX	YOU	18-JUN-1992	30-JUN-1992		2570.000 UGL	5.3
METALS IN WATER BY ICAP	SS10	MG	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		2160.000 UGL	111.0
METALS IN WATER BY ICAP	SS10	MG	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		618.000 UGL	111.0
METALS IN WATER BY ICAP	SS10	MG	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		1860.000 UGL	3.8
METALS IN WATER BY ICAP	SS10	MG	WKG507XX	YOU	18-JUN-1992	30-JUN-1992		1790.000 UGL	3.8
METALS IN WATER BY ICAP	SS10	MN	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		154.000 UGL	96.6
METALS IN WATER BY ICAP	SS10	MN	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		53.700 UGL	96.6
METALS IN WATER BY ICAP	SS10	MN	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		131.000 UGL	3.9
METALS IN WATER BY ICAP	SS10	MN	WKG507XX	YOU	18-JUN-1992	30-JUN-1992		126.000 UGL	3.9
METALS IN WATER BY ICAP	SS10	NA	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		4900.000 UGL	12.6
METALS IN WATER BY ICAP	SS10	NA	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992		4320.000 UGL	12.6
METALS IN WATER BY ICAP	SS10	NA	WDG507XX	YOU	18-JUN-1992	30-JUN-1992		24300.000 UGL	2.5
METALS IN WATER BY ICAP	SS10	NA	WKG507XX	YOU	18-JUN-1992	30-JUN-1992		23700.000 UGL	2.5
METALS IN WATER BY ICAP	SS10	NI	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	<	34.300 UGL	.0
METALS IN WATER BY ICAP	SS10	NI	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	<	34.300 UGL	.0
METALS IN WATER BY ICAP	SS10	NI	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	34.300 UGL	.0
METALS IN WATER BY ICAP	SS10	NI	WKG507XX	YOU	18-JUN-1992	30-JUN-1992	<	34.300 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
METALS IN WATER BY ICAP	SS10	V	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	11,000 UGL
METALS IN WATER BY ICAP	SS10	V	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	11,000 UGL
METALS IN WATER BY ICAP	SS10	V	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	11,000 UGL
METALS IN WATER BY ICAP	SS10	V	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	11,000 UGL
METALS IN WATER BY ICAP	SS10	ZN	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	21,100 UGL
METALS IN WATER BY ICAP	SS10	ZN	MDM13X1	ZZC	20-JUL-1992	30-JUL-1992	<	21,100 UGL
METALS IN WATER BY ICAP	SS10	ZN	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	21,100 UGL
METALS IN WATER BY ICAP	SS10	ZN	WDG507XX	YOU	18-JUN-1992	30-JUN-1992	<	21,100 UGL
NO2, NO3 IN WATER	TF22	NIT	MDM13X1	XXP	20-JUL-1992	06-AUG-1992		49.3
NO2, NO3 IN WATER	TF22	NIT	MDM13X1	XXP	20-JUL-1992	06-AUG-1992		49.3
NO2, NO3 IN WATER	TF22	NIT	WDG507XX	XXN	18-JUN-1992	01-JUL-1992		5.6
NO2, NO3 IN WATER	TF22	NIT	WDG507XX	XXN	18-JUN-1992	01-JUL-1992		5.6
N2KJEL IN WATER	TF26	N2KJEL	MDM13X1	SKO	20-JUL-1992	03-AUG-1992	<	183,000 UGL
N2KJEL IN WATER	TF26	N2KJEL	MDM13X1	SKO	20-JUL-1992	03-AUG-1992	<	183,000 UGL
N2KJEL IN WATER	TF26	N2KJEL	WDG507XX	SKN	18-JUN-1992	08-JUL-1992		1140,000 UGL
N2KJEL IN WATER	TF26	N2KJEL	WDG507XX	SKN	18-JUN-1992	08-JUL-1992		952,000 UGL
TOT. PO4 IN WATER	TF27	PO4	MDM13X1	ZCE	20-JUL-1992	11-AUG-1992		248,000 UGL
TOT. PO4 IN WATER	TF27	PO4	MDM13X1	ZCE	20-JUL-1992	11-AUG-1992		99,000 UGL
TOT. PO4 IN WATER	TF27	PO4	WDG507XX	ZCB	18-JUN-1992	24-JUN-1992		148,000 UGL
TOT. PO4 IN WATER	TF27	PO4	WDG507XX	ZCB	18-JUN-1992	24-JUN-1992		139,000 UGL
SO4 IN WATER	TT10	CL	MDM13X1	AKA	20-JUL-1992	04-AUG-1992		6140,000 UGL
SO4 IN WATER	TT10	CL	MDM13X1	AKA	20-JUL-1992	04-AUG-1992		6000,000 UGL
SO4 IN WATER	TT10	CL	WDG507XX	XIW	18-JUN-1992	07-JUL-1992		44000,000 UGL
SO4 IN WATER	TT10	CL	WDG507XX	XIW	18-JUN-1992	07-JUL-1992		44000,000 UGL
SO4 IN WATER	TT10	SO4	MDM13X1	AKA	20-JUL-1992	04-AUG-1992	<	10000,000 UGL
SO4 IN WATER	TT10	SO4	MDM13X1	AKA	20-JUL-1992	04-AUG-1992	<	10000,000 UGL
SO4 IN WATER	TT10	SO4	WDG507XX	XIW	18-JUN-1992	07-JUL-1992		12600,000 UGL
SO4 IN WATER	TT10	SO4	WDG507XX	XIW	18-JUN-1992	07-JUL-1992		12500,000 UGL
BNA'S IN WATER BY GC/MS	UM18	124TCB	MDM13X1	ZRK	20-JUL-1992	04-AUG-1992	<	1,800 UGL
BNA'S IN WATER BY GC/MS	UM18	124TCB	MDM13X1	ZRK	20-JUL-1992	05-AUG-1992	<	1,800 UGL
BNA'S IN WATER BY GC/MS	UM18	124TCB	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,800 UGL
BNA'S IN WATER BY GC/MS	UM18	124TCB	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,800 UGL
BNA'S IN WATER BY GC/MS	UM18	124TCB	MDM13X1	ZRK	20-JUL-1992	04-AUG-1992	<	1,700 UGL

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	12DCLB	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	2,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	2,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	2,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	2,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	5,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	5,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	5,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	5,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	4,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	4,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	4,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	4,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	2,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	2,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	2,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	2,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	5,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	5,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	5,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	5,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	21,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	21,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	21,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	WXS507XX	YJZ	18-JUN-1992	07-JUL-1992	<	21,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	4,500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	4,500 UGL	.0

Table F11
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	24DNT	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	4,500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	4,500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	0,790 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	0,790 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0,790 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0,790 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	0,990 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	0,990 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0,990 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CLP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0,990 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	0,500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	0,500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0,500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2CNAP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0,500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MNP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MNP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MNP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2MNP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	3,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	3,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	3,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	3,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	4,300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	4,300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	4,300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NANIL	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	4,300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	3,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	3,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	3,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	2NP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	3,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	12,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	12,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	12,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	33DCBD	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	12,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	3NANIL	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	4,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	3NANIL	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	4,900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	3NANIL	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	4,900 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	3NANIL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	46DN2C	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	17.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	46DN2C	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	17.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	46DN2C	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	17.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	46DN2C	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	17.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CANIL	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	7.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CANIL	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	7.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CANIL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	7.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CANIL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	7.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CL3C	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CL3C	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CL3C	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CL3C	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CLPPE	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CLPPE	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CLPPE	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4CLPPE	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	0.520 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	0.520 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	0.520 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	0.520 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NANIL	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NANIL	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NANIL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NANIL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	12.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	12.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	12.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	4NP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	12.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ABHC	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ABHC	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ABHC	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ABHC	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	ACLDAN	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ACLDAN	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ACLDAN	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ACLDAN	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	AENSLF	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	AENSLF	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	AENSLF	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	AENSLF	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ALDRN	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ALDRN	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ALDRN	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ALDRN	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPNE	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPNE	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPNE	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPNE	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPYL	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPYL	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPYL	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANAPYL	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANTRC	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANTRC	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANTRC	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ANTRC	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CEM	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CEM	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CEM	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CEM	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	5.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CIPE	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	5.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	1.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	1.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	LDG507XX	YJZ	18-JUN-1992	07-JUL-1992	1.900 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2CLEE	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	1.900 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	B2EHP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2EHP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2EHP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	4,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	B2EHP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	4,800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAANTR	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	1,600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAANTR	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	1,600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAANTR	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	1,600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAANTR	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	1,600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BAPYR	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	5,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBFANT	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	5,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	4,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BBHC	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	4,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BB2P	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	3,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BB2P	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	3,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BB2P	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	3,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BB2P	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	3,400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENSLF	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	10,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	10,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	10,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZID	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	10,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOZ	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	13,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOZ	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	13,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOZ	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	13,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BENZOZ	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	13,000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BGHIPY	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	6,100 UGL	.0

Table F11
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	BGHIPI	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	6.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BGHIPI	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	6.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BGHIPI	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	6.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	0.870 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	0.870 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0.870 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BKFANT	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0.870 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	0.720 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	0.720 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0.720 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	BZALC	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0.720 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CARBAZ	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CHRY	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	2.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CHRY	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	2.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CHRY	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	2.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CHRY	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	2.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6BZ	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6CP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	CL6ET	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	6.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	6.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	6.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBAHA	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	6.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	MDMH13X1	ZRK	20-JUL-1992	04-AUG-1992	<	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	MDMH13X1	ZRK	20-JUL-1992	05-AUG-1992	<	4.000 UGL	.0

Table F11
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	DBHC	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	1.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEMBZA	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	80.000 UGL	13.3
BNA'S IN WATER BY GC/MS	UM18	DEMBZA	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	70.000 UGL	13.3
BNA'S IN WATER BY GC/MS	UM18	DEP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	4.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	1.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	15.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	15.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	15.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	15.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	7.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	7.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	7.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	7.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	8.000 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	8.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ESFS04	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ESFS04	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ESFS04	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ESFS04	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FANT	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	3.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FANT	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	3.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FANT	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FANT	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.300 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FLRENE	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FLRENE	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FLRENE	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	FLRENE	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.700 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	GCLDAN	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	GCLDAN	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	GCLDAN	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	GCLDAN	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HCBD	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HCBD	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HCBD	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HCBD	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	3.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	HPCL	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	5.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ICDPYR	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ICDPYR	MMMW13X1	ZRK	20-JUL-1992	05-AUG-1992	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ICDPYR	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ICDPYR	WGS07XX	YJZ	18-JUN-1992	07-JUL-1992	8.600 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ISOPHR	MMMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.800 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	ISOPHR	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ISOPHR	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ISOPHR	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.800 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	LIN	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	LIN	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	LIN	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	LIN	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	MEXCLR	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	MEXCLR	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	MEXCLR	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	MEXCLR	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	5.100 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NAP	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NAP	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NAP	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NAP	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NB	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NB	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NB	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NB	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	2.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDNPA	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	4.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDNPA	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	4.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDNPA	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDNPA	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	4.400 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDPA	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	3.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDPA	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	3.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDPA	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	3.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	NNDPA	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	3.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	MDG507XX	YJZ	18-JUN-1992	07-JUL-1992	21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB016	WKG507XX	YJZ	18-JUN-1992	07-JUL-1992	21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB221	MDMW13X1	ZRK	20-JUL-1992	04-AUG-1992	21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB221	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	21.000 UGL	.0

Table F11
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Method Description	USATHAWA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN WATER BY GC/MS	UM18	PCB221	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB221	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB232	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB232	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB232	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB232	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 21.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB242	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB248	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 30.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB254	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCB260	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 36.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 18.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 18.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 18.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 18.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 0.500 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 9.200 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDO	MXMW13X1	ZRK	20-JUL-1992	04-AUG-1992	< 4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDO	MDMW13X1	ZRK	20-JUL-1992	05-AUG-1992	< 4.000 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDO	WDG507XX	YJZ	18-JUN-1992	07-JUL-1992	< 4.000 UGL	.0

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USATHAMA		IRDMIS		Sample		Analysis		Value Units	RPD
Method Code	Test Name	Sample Number	Lot	Date	Date	Date	Date		
Method Description									
BNA'S IN WATER BY GC/MS	PP000	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	4,000 UGL	.0
BNA'S IN WATER BY GC/MS	PP00E	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	<	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	PP00E	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	<	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	PP00E	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	PP00E	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	4,700 UGL	.0
BNA'S IN WATER BY GC/MS	PP00T	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	<	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	PP00T	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	<	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	PP00T	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	PP00T	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	9,200 UGL	.0
BNA'S IN WATER BY GC/MS	PYR	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	<	2,800 UGL	.0
BNA'S IN WATER BY GC/MS	PYR	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	<	2,800 UGL	.0
BNA'S IN WATER BY GC/MS	PYR	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	2,800 UGL	.0
BNA'S IN WATER BY GC/MS	PYR	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	2,800 UGL	.0
BNA'S IN WATER BY GC/MS	TXPHEN	MMW13X1	ZRK	20-JUL-1992	04-AUG-1992	<	<	36,000 UGL	.0
BNA'S IN WATER BY GC/MS	TXPHEN	MMW13X1	ZRK	20-JUL-1992	05-AUG-1992	<	<	36,000 UGL	.0
BNA'S IN WATER BY GC/MS	TXPHEN	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	36,000 UGL	.0
BNA'S IN WATER BY GC/MS	TXPHEN	WAG507XX	YJZ	18-JUN-1992	07-JUL-1992	<	<	36,000 UGL	.0
VOC'S IN WATER BY GC/MS	111TCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	111TCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	112TCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	1,200 UGL	.0
VOC'S IN WATER BY GC/MS	112TCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	1,200 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.680 UGL	.0
VOC'S IN WATER BY GC/MS	11DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.680 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCLP	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	12DCLP	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	2C1EVE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.710 UGL	.0
VOC'S IN WATER BY GC/MS	2C1EVE	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	<	0.710 UGL	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN WATER BY GC/MS	UM20	ACET	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	13.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACET	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	13.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACROLN	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACROLN	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACRYLO	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACRYLO	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	100.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	BRDCLM	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.590 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	BRDCLM	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.590 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C13DCP	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C13DCP	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2AVE	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	8.300 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2AVE	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	8.300 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H3CL	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	2.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H3CL	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	2.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H5CL	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	1.900 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H5CL	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	1.900 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C6H6	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C6H6	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL3F	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	1.400 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL3F	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	1.400 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL4	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL4	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	0.580 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH2CL2	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	2.300 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH2CL2	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	2.300 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3BR	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	5.800 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3BR	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	5.800 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3CL	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	3.200 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3CL	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	3.200 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CHBR3	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	2.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CHBR3	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	<	2.600 UGL	.0

Table F11
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN WATER BY GC/MS	UM20	CHCL3	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CHCL3	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CL2BZ	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 10.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CL2BZ	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 10.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CLC6H5	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CLC6H5	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CS2	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CS2	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	DBRCLM	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.670 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	DBRCLM	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.670 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ETC6H5	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ETC6H5	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEC6H5	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEC6H5	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEK	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 6.400 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEK	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 6.400 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 3.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 3.000 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MNBK	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 3.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MNBK	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 3.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	STYR	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	STYR	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	T13DCP	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.700 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	T13DCP	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.700 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEA	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.510 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEA	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.510 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEE	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 1.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEE	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 1.600 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TRCLE	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TRCLE	WKG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.500 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	XYLEN	WDG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.840 UGL	.0

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN WATER BY GC/MS	UM20	XYLEN	WAG507XX	ZPA	18-JUN-1992	22-JUN-1992	< 0.840 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	NG	MXMW13X1	XZ1	20-JUL-1992	06-AUG-1992	< 10.000 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	NG	MDMW13X1	XZ1	20-JUL-1992	06-AUG-1992	< 10.000 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	NG	WDG507XX	XZD	18-JUN-1992	02-JUL-1992	< 10.000 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	NG	WAG507XX	XZD	18-JUN-1992	02-JUL-1992	< 10.000 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	PETN	MXMW13X1	XZ1	20-JUL-1992	06-AUG-1992	< 20.000 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	PETN	MDMW13X1	XZ1	20-JUL-1992	06-AUG-1992	< 20.000 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	PETN	WDG507XX	XZD	18-JUN-1992	02-JUL-1992	< 20.000 UGL	.0
PETN/NG IN WATER BY HPLC	UW19	PETN	WAG507XX	XZD	18-JUN-1992	02-JUL-1992	< 20.000 UGL	.0
EXPLOSIVES IN WATER	UW32	135TNB	MXMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.449 UGL	.0
EXPLOSIVES IN WATER	UW32	135TNB	MDMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.449 UGL	.0
EXPLOSIVES IN WATER	UW32	135TNB	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.449 UGL	.0
EXPLOSIVES IN WATER	UW32	135TNB	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.449 UGL	.0
EXPLOSIVES IN WATER	UW32	13DNB	MXMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.611 UGL	.0
EXPLOSIVES IN WATER	UW32	13DNB	MDMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.611 UGL	.0
EXPLOSIVES IN WATER	UW32	13DNB	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.611 UGL	.0
EXPLOSIVES IN WATER	UW32	13DNB	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.611 UGL	.0
EXPLOSIVES IN WATER	UW32	246TNT	MXMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.635 UGL	.0
EXPLOSIVES IN WATER	UW32	246TNT	MDMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.635 UGL	.0
EXPLOSIVES IN WATER	UW32	246TNT	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.635 UGL	.0
EXPLOSIVES IN WATER	UW32	246TNT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.635 UGL	.0
EXPLOSIVES IN WATER	UW32	24DNT	MXMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.064 UGL	.0
EXPLOSIVES IN WATER	UW32	24DNT	MDMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.064 UGL	.0
EXPLOSIVES IN WATER	UW32	24DNT	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.064 UGL	.0
EXPLOSIVES IN WATER	UW32	24DNT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.064 UGL	.0
EXPLOSIVES IN WATER	UW32	26DNT	MXMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.074 UGL	.0
EXPLOSIVES IN WATER	UW32	26DNT	MDMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.074 UGL	.0
EXPLOSIVES IN WATER	UW32	26DNT	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.074 UGL	.0
EXPLOSIVES IN WATER	UW32	26DNT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	< 0.074 UGL	.0
EXPLOSIVES IN WATER	UW32	HMX	MXMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 1.210 UGL	.0
EXPLOSIVES IN WATER	UW32	HMX	MDMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 1.210 UGL	.0
EXPLOSIVES IN WATER	UW32	HMX	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	< 1.210 UGL	.0
EXPLOSIVES IN WATER	UW32	HMX	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	< 1.210 UGL	.0
EXPLOSIVES IN WATER	UW32	NB	MXMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.645 UGL	.0
EXPLOSIVES IN WATER	UW32	NB	MDMW13X1	YXZ	20-JUL-1992	04-AUG-1992	< 0.645 UGL	.0

Table F11
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
EXPLOSIVES IN WATER	UM32	NB	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	<	0.645 UGL	.0
EXPLOSIVES IN WATER	UM32	NB	WKG507XX	YXP	18-JUN-1992	01-JUL-1992	<	0.645 UGL	.0
EXPLOSIVES IN WATER	UM32	RDX	MDMH13X1	YXZ	20-JUL-1992	04-AUG-1992	<	1.170 UGL	.0
EXPLOSIVES IN WATER	UM32	RDX	MDMH13X1	YXZ	20-JUL-1992	04-AUG-1992	<	1.170 UGL	.0
EXPLOSIVES IN WATER	UM32	RDX	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	<	1.170 UGL	.0
EXPLOSIVES IN WATER	UM32	RDX	WKG507XX	YXP	18-JUN-1992	01-JUL-1992	<	1.170 UGL	.0
EXPLOSIVES IN WATER	UM32	TETRYL	MDMH13X1	YXZ	20-JUL-1992	04-AUG-1992	<	2.490 UGL	.0
EXPLOSIVES IN WATER	UM32	TETRYL	MDMH13X1	YXZ	20-JUL-1992	04-AUG-1992	<	2.490 UGL	.0
EXPLOSIVES IN WATER	UM32	TETRYL	WDG507XX	YXP	18-JUN-1992	01-JUL-1992	<	2.490 UGL	.0
EXPLOSIVES IN WATER	UM32	TETRYL	WKG507XX	YXP	18-JUN-1992	01-JUL-1992	<	2.490 UGL	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USAT/HAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
SE IN SOIL BY GFAA	JD15	SE	BX300108	YQR	11-JUN-1992	30-JUN-1992	0.250 UGG	.0
SE IN SOIL BY GFAA	JD15	SE	BD300108	YQS	11-JUN-1992	02-JUL-1992	0.250 UGG	.0
SE IN SOIL BY GFAA	JD15	SE	BD310515	YQS	12-JUN-1992	02-JUL-1992	0.250 UGG	.0
SE IN SOIL BY GFAA	JD15	SE	BX310515	YQS	12-JUN-1992	02-JUL-1992	0.250 UGG	.0
SE IN SOIL BY GFAA	JD15	SE	BD660340	YQR	10-JUN-1992	30-JUN-1992	0.250 UGG	.0
SE IN SOIL BY GFAA	JD15	SE	BX660340	YQR	10-JUN-1992	30-JUN-1992	0.250 UGG	.0
PB IN SOIL BY GFAA	JD17	PB	BX300108	ZAK	11-JUN-1992	15-JUL-1992	3.070 UGG	5.4
PB IN SOIL BY GFAA	JD17	PB	BD300108	ZAL	11-JUN-1992	08-JUL-1992	2.910 UGG	5.4
PB IN SOIL BY GFAA	JD17	PB	BD310515	ZAL	12-JUN-1992	08-JUL-1992	5.580 UGG	19.5
PB IN SOIL BY GFAA	JD17	PB	BX310515	ZAL	12-JUN-1992	08-JUL-1992	4.590 UGG	19.5
PB IN SOIL BY GFAA	JD17	PB	BD500608	ZAU	26-JUN-1992	23-JUL-1992	4.440 UGG	19.8
PB IN SOIL BY GFAA	JD17	PB	BD500608	ZAV	26-JUN-1992	24-JUL-1992	3.640 UGG	19.8
PB IN SOIL BY GFAA	JD17	PB	BX660340	ZAK	10-JUN-1992	15-JUL-1992	2.930 UGG	18.7
PB IN SOIL BY GFAA	JD17	PB	BD660340	ZAL	10-JUN-1992	08-JUL-1992	2.430 UGG	18.7
PB IN SOIL BY GFAA	JD17	PB	BX660760	ZAU	24-JUN-1992	23-JUL-1992	4.700 UGG	130.5
PB IN SOIL BY GFAA	JD17	PB	BD660760	ZAU	24-JUN-1992	23-JUL-1992	0.989 UGG	130.5
PB IN SOIL BY GFAA	JD17	PB	BX661112	ZAV	25-JUN-1992	24-JUL-1992	3.570 UGG	18.7
PB IN SOIL BY GFAA	JD17	PB	BD661112	ZAU	25-JUN-1992	23-JUL-1992	2.960 UGG	18.7
TOC	00	TOC	BD661112	ZHY	25-JUN-1992	11-JUL-1992	661.000 UGG	74.3
TOC	00	TOC	BX661112	ZHY	25-JUN-1992	11-JUL-1992	303.000 UGG	74.3
TPHC	00	TPHC	BD300108	ZOU	11-JUN-1992	29-JUN-1992	40.500 UGG	34.8
TPHC	00	TPHC	BX300108	ZWB	11-JUN-1992	19-JUN-1992	28.500 UGG	34.8
TPHC	00	TPHC	BX310515	ZOU	12-JUN-1992	29-JUN-1992	71.400 UGG	.8
TPHC	00	TPHC	BD310515	ZOU	12-JUN-1992	29-JUN-1992	70.800 UGG	.8
TPHC	00	TPHC	BD500608	AGS	26-JUN-1992	22-JUL-1992	51.400 UGG	28.2
TPHC	00	TPHC	BD500608	AGS	26-JUN-1992	22-JUL-1992	38.700 UGG	28.2
TPHC	00	TPHC	BD660340	ZWB	10-JUN-1992	19-JUN-1992	44.700 UGG	43.6
TPHC	00	TPHC	BX660340	ALO	10-JUN-1992	18-JUN-1992	28.700 UGG	43.6
TPHC	00	TPHC	BX660760	ZWR	24-JUN-1992	17-JUL-1992	39.300 UGG	34.6
TPHC	00	TPHC	BX660760	ZWR	24-JUN-1992	17-JUL-1992	27.700 UGG	34.6
TPHC	00	TPHC	BX661112	AGC	25-JUN-1992	22-JUL-1992	51.500 UGG	8.3
TPHC	00	TPHC	BD661112	AGS	25-JUN-1992	22-JUL-1992	47.400 UGG	8.3
HG	JB01	HG	BX300108	YHX	11-JUN-1992	03-JUL-1992	0.050 UGG	.0
HG	JB01	HG	BD300108	YHY	11-JUN-1992	03-JUL-1992	0.050 UGG	.0
HG	JB01	HG	BD310515	YHY	12-JUN-1992	03-JUL-1992	0.050 UGG	.0
HG	JB01	HG	BX310515	YHY	12-JUN-1992	03-JUL-1992	0.050 UGG	.0
HG	JB01	HG	BD660340	YHY	10-JUN-1992	03-JUL-1992	0.050 UGG	.0
HG	JB01	HG	BX660340	YHX	10-JUN-1992	03-JUL-1992	0.050 UGG	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
AS IN SOIL BY GFAA	JD19	AS	BD300108	ZIB	11-JUN-1992	01-JUL-1992		8.070 UGG	44.4
AS IN SOIL BY GFAA	JD19	AS	BD300108	ZIA	11-JUN-1992	29-JUN-1992		5.140 UGG	44.4
AS IN SOIL BY GFAA	JD19	AS	BD310515	ZIB	12-JUN-1992	01-JUL-1992		7.680 UGG	14.2
AS IN SOIL BY GFAA	JD19	AS	BD310515	ZIB	12-JUN-1992	01-JUL-1992		6.660 UGG	14.2
AS IN SOIL BY GFAA	JD19	AS	BDG60340	ZIB	10-JUN-1992	01-JUL-1992		7.720 UGG	7.0
AS IN SOIL BY GFAA	JD19	AS	BDG60340	ZIA	10-JUN-1992	29-JUN-1992		7.200 UGG	7.0
TL IN SOIL BY GFAA	JD24	TL	BD300108	ZLA	11-JUN-1992	07-JUL-1992	<	0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BD300108	ZLB	11-JUN-1992	08-JUL-1992	<	0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BD310515	ZLB	12-JUN-1992	08-JUL-1992	<	0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BD310515	ZLB	12-JUN-1992	08-JUL-1992	<	0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BDG60340	ZLB	10-JUN-1992	08-JUL-1992	<	0.500 UGG	.0
TL IN SOIL BY GFAA	JD24	TL	BDG60340	ZLA	10-JUN-1992	07-JUL-1992	<	0.500 UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BD300108	ZMA	11-JUN-1992	09-JUL-1992	<	1.090 UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BD300108	ZMB	11-JUN-1992	16-JUL-1992	<	1.090 UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BD310515	ZMB	12-JUN-1992	16-JUL-1992	<	1.090 UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BDG60340	ZMB	10-JUN-1992	16-JUL-1992	<	1.090 UGG	.0
SB IN SOIL BY GFAA	JD25	SB	BDG60340	ZMA	10-JUN-1992	09-JUL-1992	<	1.090 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BD300108	YGY	11-JUN-1992	25-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BD300108	YGY	11-JUN-1992	27-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BD310304	YGY	11-JUN-1992	27-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BD310304	YGY	11-JUN-1992	27-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BD310515	YGY	12-JUN-1992	27-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BD310515	YGY	12-JUN-1992	27-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BDG60340	YGY	10-JUN-1992	27-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	BDG60340	YGY	10-JUN-1992	25-JUN-1992	<	0.589 UGG	.0
METALS IN SOIL BY ICAP	JS16	AL	BD300108	YGY	11-JUN-1992	25-JUN-1992		2600.000 UGG	21.7
METALS IN SOIL BY ICAP	JS16	AL	BD300108	YGY	11-JUN-1992	27-JUN-1992		2090.000 UGG	21.7
METALS IN SOIL BY ICAP	JS16	AL	BD310304	YGY	11-JUN-1992	27-JUN-1992		5650.000 UGG	66.8
METALS IN SOIL BY ICAP	JS16	AL	BD310304	YGY	11-JUN-1992	27-JUN-1992		2820.000 UGG	66.8
METALS IN SOIL BY ICAP	JS16	AL	BD310515	YGY	12-JUN-1992	27-JUN-1992		4370.000 UGG	39.5
METALS IN SOIL BY ICAP	JS16	AL	BD310515	YGY	12-JUN-1992	27-JUN-1992		2930.000 UGG	39.5
METALS IN SOIL BY ICAP	JS16	AL	BDG60340	YGY	10-JUN-1992	25-JUN-1992		4020.000 UGG	28.7
METALS IN SOIL BY ICAP	JS16	AL	BDG60340	YGY	10-JUN-1992	27-JUN-1992		3010.000 UGG	28.7
METALS IN SOIL BY ICAP	JS16	BA	BD300108	YGY	11-JUN-1992	25-JUN-1992		14.600 UGG	17.9
METALS IN SOIL BY ICAP	JS16	BA	BD300108	YGY	11-JUN-1992	27-JUN-1992		12.200 UGG	17.9
METALS IN SOIL BY ICAP	JS16	BA	BD310304	YGY	11-JUN-1992	27-JUN-1992		13.400 UGG	3.8

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
METALS IN SOIL BY ICAP	JS16	BA	BX310304	YGZ	11-JUN-1992	27-JUN-1992		12.900 UGG	3.8
METALS IN SOIL BY ICAP	JS16	BA	BX310515	YGZ	12-JUN-1992	27-JUN-1992		20.100 UGG	42.2
METALS IN SOIL BY ICAP	JS16	BA	BD310515	YGZ	12-JUN-1992	27-JUN-1992		13.100 UGG	42.2
METALS IN SOIL BY ICAP	JS16	BA	BDG60340	YGZ	10-JUN-1992	27-JUN-1992		20.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	BA	BXG60340	YGZ	10-JUN-1992	25-JUN-1992		20.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	BX300108	YGZ	11-JUN-1992	25-JUN-1992		0.500 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	BD300108	YGZ	11-JUN-1992	27-JUN-1992		0.500 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	BX310304	YGZ	11-JUN-1992	27-JUN-1992		0.500 UGG	.0
METALS IN SOIL BY ICAP	JS16	BE	BX310515	YGZ	12-JUN-1992	27-JUN-1992		0.608 UGG	19.5
METALS IN SOIL BY ICAP	JS16	BE	BD310515	YGZ	12-JUN-1992	27-JUN-1992		0.500 UGG	19.5
METALS IN SOIL BY ICAP	JS16	BE	BDG60340	YGZ	10-JUN-1992	27-JUN-1992		0.594 UGG	17.2
METALS IN SOIL BY ICAP	JS16	BE	BXG60340	YGZ	10-JUN-1992	25-JUN-1992		0.500 UGG	17.2
METALS IN SOIL BY ICAP	JS16	CA	BX300108	YGZ	11-JUN-1992	25-JUN-1992		480.000 UGG	14.5
METALS IN SOIL BY ICAP	JS16	CA	BD300108	YGZ	11-JUN-1992	27-JUN-1992		415.000 UGG	14.5
METALS IN SOIL BY ICAP	JS16	CA	BX310304	YGZ	11-JUN-1992	27-JUN-1992		374.000 UGG	13.7
METALS IN SOIL BY ICAP	JS16	CA	BX310515	YGZ	12-JUN-1992	27-JUN-1992		326.000 UGG	13.7
METALS IN SOIL BY ICAP	JS16	CA	BD310515	YGZ	12-JUN-1992	27-JUN-1992		735.000 UGG	16.0
METALS IN SOIL BY ICAP	JS16	CA	BDG60340	YGZ	10-JUN-1992	27-JUN-1992		626.000 UGG	16.0
METALS IN SOIL BY ICAP	JS16	CA	BXG60340	YGZ	10-JUN-1992	25-JUN-1992		1110.000 UGG	28.9
METALS IN SOIL BY ICAP	JS16	CA	BDG60340	YGZ	10-JUN-1992	27-JUN-1992		830.000 UGG	28.9
METALS IN SOIL BY ICAP	JS16	CD	BX300108	YGZ	11-JUN-1992	25-JUN-1992		0.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BD300108	YGZ	11-JUN-1992	27-JUN-1992		0.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BX310304	YGZ	11-JUN-1992	27-JUN-1992		0.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BX310515	YGZ	12-JUN-1992	27-JUN-1992		0.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BD310515	YGZ	12-JUN-1992	27-JUN-1992		0.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BDG60340	YGZ	10-JUN-1992	27-JUN-1992		0.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	CD	BXG60340	YGZ	10-JUN-1992	25-JUN-1992		0.700 UGG	.0
METALS IN SOIL BY ICAP	JS16	CO	BD300108	YGZ	11-JUN-1992	27-JUN-1992		2.500 UGG	13.2
METALS IN SOIL BY ICAP	JS16	CO	BX300108	YGZ	11-JUN-1992	25-JUN-1992		2.190 UGG	13.2
METALS IN SOIL BY ICAP	JS16	CO	BX310304	YGZ	11-JUN-1992	27-JUN-1992		3.280 UGG	23.5
METALS IN SOIL BY ICAP	JS16	CO	BX310515	YGZ	12-JUN-1992	27-JUN-1992		2.590 UGG	23.5
METALS IN SOIL BY ICAP	JS16	CO	BD310515	YGZ	12-JUN-1992	27-JUN-1992		3.660 UGG	20.5
METALS IN SOIL BY ICAP	JS16	CO	BDG60340	YGZ	10-JUN-1992	27-JUN-1992		2.980 UGG	20.5
METALS IN SOIL BY ICAP	JS16	CO	BXG60340	YGZ	10-JUN-1992	25-JUN-1992		3.580 UGG	23.8
METALS IN SOIL BY ICAP	JS16	CO	BDG60340	YGZ	10-JUN-1992	27-JUN-1992		2.820 UGG	23.8
METALS IN SOIL BY ICAP	JS16	CR	BX300108	YGZ	11-JUN-1992	25-JUN-1992		7.390 UGG	26.3
METALS IN SOIL BY ICAP	JS16	CR	BD300108	YGZ	11-JUN-1992	27-JUN-1992		5.670 UGG	26.3
METALS IN SOIL BY ICAP	JS16	CR	BX310304	YGZ	11-JUN-1992	27-JUN-1992		8.180 UGG	44.4
METALS IN SOIL BY ICAP	JS16	CR	BX310515	YGZ	11-JUN-1992	27-JUN-1992		5.210 UGG	44.4

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
METALS IN SOIL BY ICAP	JS16	CR	BX310515	YGZ	12-JUN-1992	27-JUN-1992	18.800 UGG	81.9
METALS IN SOIL BY ICAP	JS16	CR	BX310515	YGZ	12-JUN-1992	27-JUN-1992	7.880 UGG	81.9
METALS IN SOIL BY ICAP	JS16	CR	BXG60340	YGZ	10-JUN-1992	25-JUN-1992	7.210 UGG	16.2
METALS IN SOIL BY ICAP	JS16	CR	BXG60340	YGZ	10-JUN-1992	27-JUN-1992	6.130 UGG	16.2
METALS IN SOIL BY ICAP	JS16	CU	BX300108	YGZ	11-JUN-1992	27-JUN-1992	4.200 UGG	12.9
METALS IN SOIL BY ICAP	JS16	CU	BX300108	YGZ	11-JUN-1992	25-JUN-1992	3.690 UGG	12.9
METALS IN SOIL BY ICAP	JS16	CU	BX310304	YGZ	11-JUN-1992	27-JUN-1992	7.110 UGG	33.7
METALS IN SOIL BY ICAP	JS16	CU	BX310304	YGZ	11-JUN-1992	27-JUN-1992	5.060 UGG	33.7
METALS IN SOIL BY ICAP	JS16	CU	BX310515	YGZ	12-JUN-1992	27-JUN-1992	6.700 UGG	15.6
METALS IN SOIL BY ICAP	JS16	CU	BX310515	YGZ	12-JUN-1992	27-JUN-1992	5.730 UGG	15.6
METALS IN SOIL BY ICAP	JS16	CU	BXG60340	YGZ	10-JUN-1992	25-JUN-1992	4.800 UGG	14.8
METALS IN SOIL BY ICAP	JS16	CU	BXG60340	YGZ	10-JUN-1992	27-JUN-1992	4.140 UGG	14.8
METALS IN SOIL BY ICAP	JS16	FE	BX300108	YGZ	11-JUN-1992	25-JUN-1992	4180.000 UGG	18.3
METALS IN SOIL BY ICAP	JS16	FE	BX300108	YGZ	11-JUN-1992	27-JUN-1992	3480.000 UGG	18.3
METALS IN SOIL BY ICAP	JS16	FE	BX310304	YGZ	11-JUN-1992	27-JUN-1992	4980.000 UGG	14.2
METALS IN SOIL BY ICAP	JS16	FE	BX310304	YGZ	11-JUN-1992	27-JUN-1992	4320.000 UGG	14.2
METALS IN SOIL BY ICAP	JS16	FE	BX310515	YGZ	12-JUN-1992	27-JUN-1992	6570.000 UGG	38.0
METALS IN SOIL BY ICAP	JS16	FE	BX310515	YGZ	12-JUN-1992	27-JUN-1992	4470.000 UGG	38.0
METALS IN SOIL BY ICAP	JS16	FE	BXG60340	YGZ	10-JUN-1992	25-JUN-1992	6680.000 UGG	29.0
METALS IN SOIL BY ICAP	JS16	FE	BXG60340	YGZ	10-JUN-1992	27-JUN-1992	4990.000 UGG	29.0
METALS IN SOIL BY ICAP	JS16	K	BX300108	YGZ	11-JUN-1992	25-JUN-1992	479.000 UGG	21.8
METALS IN SOIL BY ICAP	JS16	K	BX300108	YGZ	11-JUN-1992	27-JUN-1992	385.000 UGG	21.8
METALS IN SOIL BY ICAP	JS16	K	BX310304	YGZ	11-JUN-1992	27-JUN-1992	536.000 UGG	54.6
METALS IN SOIL BY ICAP	JS16	K	BX310304	YGZ	11-JUN-1992	27-JUN-1992	306.000 UGG	54.6
METALS IN SOIL BY ICAP	JS16	K	BX310515	YGZ	12-JUN-1992	27-JUN-1992	850.000 UGG	62.8
METALS IN SOIL BY ICAP	JS16	K	BX310515	YGZ	12-JUN-1992	27-JUN-1992	444.000 UGG	62.8
METALS IN SOIL BY ICAP	JS16	K	BXG60340	YGZ	10-JUN-1992	25-JUN-1992	834.000 UGG	17.9
METALS IN SOIL BY ICAP	JS16	K	BXG60340	YGZ	10-JUN-1992	27-JUN-1992	697.000 UGG	17.9
METALS IN SOIL BY ICAP	JS16	MG	BX300108	YGZ	11-JUN-1992	25-JUN-1992	1130.000 UGG	28.6
METALS IN SOIL BY ICAP	JS16	MG	BX300108	YGZ	11-JUN-1992	27-JUN-1992	847.000 UGG	28.6
METALS IN SOIL BY ICAP	JS16	MG	BX310304	YGZ	11-JUN-1992	27-JUN-1992	1020.000 UGG	4.3
METALS IN SOIL BY ICAP	JS16	MG	BX310304	YGZ	11-JUN-1992	27-JUN-1992	977.000 UGG	4.3
METALS IN SOIL BY ICAP	JS16	MG	BX310515	YGZ	12-JUN-1992	27-JUN-1992	2050.000 UGG	72.1
METALS IN SOIL BY ICAP	JS16	MG	BX310515	YGZ	12-JUN-1992	27-JUN-1992	964.000 UGG	72.1
METALS IN SOIL BY ICAP	JS16	MG	BXG60340	YGZ	10-JUN-1992	25-JUN-1992	1500.000 UGG	41.1
METALS IN SOIL BY ICAP	JS16	MG	BXG60340	YGZ	10-JUN-1992	27-JUN-1992	989.000 UGG	41.1
METALS IN SOIL BY ICAP	JS16	MN	BX300108	YGZ	11-JUN-1992	27-JUN-1992	87.000 UGG	.1
METALS IN SOIL BY ICAP	JS16	MN	BX300108	YGZ	11-JUN-1992	25-JUN-1992	86.900 UGG	.1
METALS IN SOIL BY ICAP	JS16	MN	BX310304	YGZ	11-JUN-1992	27-JUN-1992	92.000 UGG	39.3
METALS IN SOIL BY ICAP	JS16	MN	BX310304	YGZ	11-JUN-1992	27-JUN-1992	61.800 UGG	39.3
METALS IN SOIL BY ICAP	JS16	MN	BX310515	YGZ	12-JUN-1992	27-JUN-1992	126.000 UGG	23.4

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
METALS IN SOIL BY ICAP	JS16	MN	BD310515	YGZ	12-JUN-1992	27-JUN-1992	99,600 UGG	23.4
METALS IN SOIL BY ICAP	JS16	MN	BDG60340	YGZ	10-JUN-1992	27-JUN-1992	118,000 UGG	3.4
METALS IN SOIL BY ICAP	JS16	MN	BDG60340	YGY	10-JUN-1992	25-JUN-1992	114,000 UGG	3.4
METALS IN SOIL BY ICAP	JS16	NA	BX300108	YGY	11-JUN-1992	25-JUN-1992	160,000 UGG	46.2
METALS IN SOIL BY ICAP	JS16	NA	BD300108	YGZ	11-JUN-1992	27-JUN-1992	100,000 UGG	46.2
METALS IN SOIL BY ICAP	JS16	NA	BX310304	YGZ	11-JUN-1992	27-JUN-1992	117,000 UGG	.9
METALS IN SOIL BY ICAP	JS16	NA	BX310304	YGZ	11-JUN-1992	27-JUN-1992	116,000 UGG	.9
METALS IN SOIL BY ICAP	JS16	NA	BX310515	YGZ	12-JUN-1992	27-JUN-1992	154,000 UGG	23.2
METALS IN SOIL BY ICAP	JS16	NA	BD310515	YGZ	12-JUN-1992	27-JUN-1992	122,000 UGG	23.2
METALS IN SOIL BY ICAP	JS16	NA	BXG60340	YGY	10-JUN-1992	25-JUN-1992	161,000 UGG	18.3
METALS IN SOIL BY ICAP	JS16	NA	BDG60340	YGZ	10-JUN-1992	27-JUN-1992	134,000 UGG	18.3
METALS IN SOIL BY ICAP	JS16	NI	BD300108	YGZ	11-JUN-1992	27-JUN-1992	5,760 UGG	8.7
METALS IN SOIL BY ICAP	JS16	NI	BX300108	YGY	11-JUN-1992	25-JUN-1992	5,280 UGG	8.7
METALS IN SOIL BY ICAP	JS16	NI	BX310304	YGZ	11-JUN-1992	27-JUN-1992	6,970 UGG	15.0
METALS IN SOIL BY ICAP	JS16	NI	BX310304	YGZ	11-JUN-1992	27-JUN-1992	6,000 UGG	15.0
METALS IN SOIL BY ICAP	JS16	NI	BX310515	YGZ	12-JUN-1992	27-JUN-1992	12,000 UGG	74.0
METALS IN SOIL BY ICAP	JS16	NI	BD310515	YGZ	12-JUN-1992	27-JUN-1992	5,520 UGG	74.0
METALS IN SOIL BY ICAP	JS16	NI	BDG60340	YGZ	10-JUN-1992	27-JUN-1992	7,580 UGG	.3
METALS IN SOIL BY ICAP	JS16	NI	BXG60340	YGY	10-JUN-1992	25-JUN-1992	7,560 UGG	.3
METALS IN SOIL BY ICAP	JS16	V	BX300108	YGY	11-JUN-1992	25-JUN-1992	5,520 UGG	36.4
METALS IN SOIL BY ICAP	JS16	V	BD300108	YGZ	11-JUN-1992	27-JUN-1992	3,820 UGG	36.4
METALS IN SOIL BY ICAP	JS16	V	BX310304	YGZ	11-JUN-1992	27-JUN-1992	5,870 UGG	15.0
METALS IN SOIL BY ICAP	JS16	V	BX310304	YGZ	11-JUN-1992	27-JUN-1992	5,050 UGG	15.0
METALS IN SOIL BY ICAP	JS16	V	BX310515	YGZ	12-JUN-1992	27-JUN-1992	8,720 UGG	67.5
METALS IN SOIL BY ICAP	JS16	V	BD310515	YGZ	12-JUN-1992	27-JUN-1992	4,320 UGG	67.5
METALS IN SOIL BY ICAP	JS16	V	BXG60340	YGY	10-JUN-1992	25-JUN-1992	7,500 UGG	26.4
METALS IN SOIL BY ICAP	JS16	V	BDG60340	YGZ	10-JUN-1992	27-JUN-1992	5,750 UGG	26.4
METALS IN SOIL BY ICAP	JS16	ZN	BX300108	YGY	11-JUN-1992	25-JUN-1992	14,600 UGG	22.1
METALS IN SOIL BY ICAP	JS16	ZN	BD300108	YGZ	11-JUN-1992	27-JUN-1992	11,700 UGG	22.1
METALS IN SOIL BY ICAP	JS16	ZN	BX310304	YGZ	11-JUN-1992	27-JUN-1992	14,000 UGG	10.5
METALS IN SOIL BY ICAP	JS16	ZN	BX310304	YGZ	11-JUN-1992	27-JUN-1992	12,600 UGG	10.5
METALS IN SOIL BY ICAP	JS16	ZN	BX310515	YGZ	12-JUN-1992	27-JUN-1992	26,500 UGG	53.6
METALS IN SOIL BY ICAP	JS16	ZN	BD310515	YGZ	12-JUN-1992	27-JUN-1992	15,300 UGG	53.6
METALS IN SOIL BY ICAP	JS16	ZN	BXG60340	YGY	10-JUN-1992	25-JUN-1992	19,100 UGG	20.8
METALS IN SOIL BY ICAP	JS16	ZN	BDG60340	YGZ	10-JUN-1992	27-JUN-1992	15,500 UGG	20.8
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.040 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BD300108	YLY	11-JUN-1992	27-JUN-1992	0.040 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BX310515	YLY	12-JUN-1992	27-JUN-1992	0.200 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.040 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BDG60340	YLY	10-JUN-1992	23-JUN-1992	0.040 UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.040 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.600 UGG	138.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.110 UGG	138.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DCLB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.500 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.140 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	12DPH	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.130 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.130 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.600 UGG	128.8
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.130 UGG	128.8
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.130 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	13DCLB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.130 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.098 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.098 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.500 UGG	134.4
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.098 UGG	134.4
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.098 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	14DCLB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.098 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.500 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.100 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	245TCP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.800 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.170 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	246TCP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.180 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	24DCLP	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.180 UGG	.0

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USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Description								
BNA'S IN SOIL BY GC/MS	24DCLP	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	0.900 UGG	133.3
BNA'S IN SOIL BY GC/MS	24DCLP	80310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.180 UGG	133.3
BNA'S IN SOIL BY GC/MS	24DCLP	80G60340	YLV	10-JUN-1992	23-JUN-1992	<	0.180 UGG	.0
BNA'S IN SOIL BY GC/MS	24DCLP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.180 UGG	.0
BNA'S IN SOIL BY GC/MS	24DMPN	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.690 UGG	.0
BNA'S IN SOIL BY GC/MS	24DMPN	80300108	YLV	11-JUN-1992	27-JUN-1992	<	0.690 UGG	.0
BNA'S IN SOIL BY GC/MS	24DMPN	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	3.000 UGG	125.2
BNA'S IN SOIL BY GC/MS	24DMPN	80310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.690 UGG	125.2
BNA'S IN SOIL BY GC/MS	24DMPN	80G60340	YLV	10-JUN-1992	23-JUN-1992	<	0.690 UGG	.0
BNA'S IN SOIL BY GC/MS	24DMPN	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.690 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	1.200 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNP	80300108	YLV	11-JUN-1992	27-JUN-1992	<	1.200 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNP	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	6.000 UGG	133.3
BNA'S IN SOIL BY GC/MS	24DNP	80310515	ZNA	12-JUN-1992	27-JUN-1992	<	1.200 UGG	133.3
BNA'S IN SOIL BY GC/MS	24DNP	80G60340	YLV	10-JUN-1992	23-JUN-1992	<	1.200 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	1.200 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNT	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNT	80300108	YLV	11-JUN-1992	27-JUN-1992	<	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNT	BX310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.700 UGG	133.3
BNA'S IN SOIL BY GC/MS	24DNT	80310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.140 UGG	133.3
BNA'S IN SOIL BY GC/MS	24DNT	80G60340	YLV	10-JUN-1992	23-JUN-1992	<	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	24DNT	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	26DNT	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.085 UGG	.0
BNA'S IN SOIL BY GC/MS	26DNT	80300108	YLV	11-JUN-1992	27-JUN-1992	<	0.085 UGG	.0
BNA'S IN SOIL BY GC/MS	26DNT	BX310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.400 UGG	129.9
BNA'S IN SOIL BY GC/MS	26DNT	80310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.085 UGG	129.9
BNA'S IN SOIL BY GC/MS	26DNT	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.085 UGG	.0
BNA'S IN SOIL BY GC/MS	26DNT	80G60340	YLV	10-JUN-1992	23-JUN-1992	<	0.085 UGG	.0
BNA'S IN SOIL BY GC/MS	2CLP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.060 UGG	.0
BNA'S IN SOIL BY GC/MS	2CLP	80300108	YLV	11-JUN-1992	27-JUN-1992	<	0.060 UGG	.0
BNA'S IN SOIL BY GC/MS	2CLP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.300 UGG	133.3
BNA'S IN SOIL BY GC/MS	2CLP	80310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.060 UGG	133.3
BNA'S IN SOIL BY GC/MS	2CLP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.060 UGG	.0
BNA'S IN SOIL BY GC/MS	2CLP	80G60340	YLV	10-JUN-1992	23-JUN-1992	<	0.060 UGG	.0
BNA'S IN SOIL BY GC/MS	2CNAP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.036 UGG	.0
BNA'S IN SOIL BY GC/MS	2CNAP	80300108	YLV	11-JUN-1992	27-JUN-1992	<	0.036 UGG	.0
BNA'S IN SOIL BY GC/MS	2CNAP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.200 UGG	139.0
BNA'S IN SOIL BY GC/MS	2CNAP	80310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.036 UGG	139.0
BNA'S IN SOIL BY GC/MS	2CNAP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.036 UGG	.0
BNA'S IN SOIL BY GC/MS	2CNAP	80G60340	YLV	10-JUN-1992	23-JUN-1992	<	0.036 UGG	.0

Table F13
Sample Duplicate Quality Control Report
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Group: 6

USATHAMA		IRDMIS		Sample		Analysis		Value		Units		RPD	
Method	Test	Sample	Lot	Date	Date	Date	Date	Value	Units	Value	Units	RPD	RPD
Code	Name	Number											
Method Description													
BNA'S IN SOIL BY GC/MS	2MNA	BM300108	ZNA	11-JUN-1992	26-JUN-1992	<	<	0.049	UGG	0.049	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM300108	YX	11-JUN-1992	27-JUN-1992	<	<	0.049	UGG	0.049	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	12-JUN-1992	27-JUN-1992	<	<	0.200	UGG	0.200	UGG	121.3	121.3
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	12-JUN-1992	27-JUN-1992	<	<	0.049	UGG	0.049	UGG	121.3	121.3
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.049	UGG	0.049	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.049	UGG	0.049	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	11-JUN-1992	26-JUN-1992	<	<	0.029	UGG	0.029	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	11-JUN-1992	27-JUN-1992	<	<	0.029	UGG	0.029	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	12-JUN-1992	27-JUN-1992	<	<	0.100	UGG	0.100	UGG	110.1	110.1
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	12-JUN-1992	27-JUN-1992	<	<	0.029	UGG	0.029	UGG	110.1	110.1
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.029	UGG	0.029	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.029	UGG	0.029	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	11-JUN-1992	26-JUN-1992	<	<	0.062	UGG	0.062	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	11-JUN-1992	27-JUN-1992	<	<	0.062	UGG	0.062	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	12-JUN-1992	27-JUN-1992	<	<	0.300	UGG	0.300	UGG	131.5	131.5
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	12-JUN-1992	27-JUN-1992	<	<	0.062	UGG	0.062	UGG	131.5	131.5
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.062	UGG	0.062	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.062	UGG	0.062	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	11-JUN-1992	26-JUN-1992	<	<	0.140	UGG	0.140	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	11-JUN-1992	27-JUN-1992	<	<	0.140	UGG	0.140	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	12-JUN-1992	27-JUN-1992	<	<	0.700	UGG	0.700	UGG	133.3	133.3
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	12-JUN-1992	27-JUN-1992	<	<	0.140	UGG	0.140	UGG	133.3	133.3
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.140	UGG	0.140	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.140	UGG	0.140	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	11-JUN-1992	26-JUN-1992	<	<	6.300	UGG	6.300	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	11-JUN-1992	27-JUN-1992	<	<	6.300	UGG	6.300	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	12-JUN-1992	27-JUN-1992	<	<	30.000	UGG	30.000	UGG	130.6	130.6
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	12-JUN-1992	27-JUN-1992	<	<	6.300	UGG	6.300	UGG	130.6	130.6
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	6.300	UGG	6.300	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	6.300	UGG	6.300	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	11-JUN-1992	26-JUN-1992	<	<	0.450	UGG	0.450	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	11-JUN-1992	27-JUN-1992	<	<	0.450	UGG	0.450	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	12-JUN-1992	27-JUN-1992	<	<	2.000	UGG	2.000	UGG	126.5	126.5
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	12-JUN-1992	27-JUN-1992	<	<	0.450	UGG	0.450	UGG	126.5	126.5
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.450	UGG	0.450	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	10-JUN-1992	23-JUN-1992	<	<	0.450	UGG	0.450	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	ZNA	11-JUN-1992	26-JUN-1992	<	<	0.550	UGG	0.550	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	11-JUN-1992	27-JUN-1992	<	<	0.550	UGG	0.550	UGG	.0	.0
BNA'S IN SOIL BY GC/MS	2MNA	BM310515	YX	12-JUN-1992	27-JUN-1992	<	<	3.000	UGG	3.000	UGG	138.0	138.0

Table F13
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USATHANA Method Code	Method Description	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
LM18	BNA'S IN SOIL BY GC/MS	46DM2C	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.550 UGG	138.0
LM18	BNA'S IN SOIL BY GC/MS	46DM2C	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.550 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	46DM2C	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.550 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	48RPPE	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	48RPPE	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	48RPPE	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
LM18	BNA'S IN SOIL BY GC/MS	48RPPE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
LM18	BNA'S IN SOIL BY GC/MS	48RPPE	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	48RPPE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CANIL	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.810 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CANIL	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.810 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CANIL	BX310515	YLV	12-JUN-1992	27-JUN-1992	4.000 UGG	132.6
LM18	BNA'S IN SOIL BY GC/MS	4CANIL	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.810 UGG	132.6
LM18	BNA'S IN SOIL BY GC/MS	4CANIL	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.810 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CANIL	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.810 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CL3C	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.095 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CL3C	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.095 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CL3C	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.500 UGG	136.1
LM18	BNA'S IN SOIL BY GC/MS	4CL3C	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.095 UGG	136.1
LM18	BNA'S IN SOIL BY GC/MS	4CL3C	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.095 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CL3C	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.095 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CLPPE	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CLPPE	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CLPPE	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
LM18	BNA'S IN SOIL BY GC/MS	4CLPPE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
LM18	BNA'S IN SOIL BY GC/MS	4CLPPE	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4CLPPE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4MP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.240 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4MP	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.240 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4MP	BX310515	YLV	12-JUN-1992	27-JUN-1992	1.000 UGG	122.6
LM18	BNA'S IN SOIL BY GC/MS	4MP	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.240 UGG	122.6
LM18	BNA'S IN SOIL BY GC/MS	4MP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.240 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4MP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.240 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4ANIL	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.410 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4ANIL	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.410 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4ANIL	BX310515	YLV	12-JUN-1992	27-JUN-1992	2.000 UGG	132.0
LM18	BNA'S IN SOIL BY GC/MS	4ANIL	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.410 UGG	132.0
LM18	BNA'S IN SOIL BY GC/MS	4ANIL	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.410 UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	4ANIL	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.410 UGG	.0

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USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	4NP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	4NP	BX300108	YLV	11-JUN-1992	27-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	4NP	BX310515	YLV	12-JUN-1992	27-JUN-1992	7.000 UGG	133.3
BNA'S IN SOIL BY GC/MS	4NP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	1.400 UGG	133.3
BNA'S IN SOIL BY GC/MS	4NP	BX310515	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	4NP	BX60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	ABHC	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	ABHC	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	ABHC	BX310515	ZNA	12-JUN-1992	27-JUN-1992	2.000 UGG	152.4
BNA'S IN SOIL BY GC/MS	ABHC	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.270 UGG	152.4
BNA'S IN SOIL BY GC/MS	ABHC	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	ABHC	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	ACLDAN	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	ACLDAN	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	ACLDAN	BX310515	ZNA	12-JUN-1992	27-JUN-1992	2.000 UGG	143.3
BNA'S IN SOIL BY GC/MS	ACLDAN	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	143.3
BNA'S IN SOIL BY GC/MS	ACLDAN	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	ACLDAN	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	AENSLF	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	AENSLF	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	AENSLF	BX310515	ZNA	12-JUN-1992	27-JUN-1992	3.000 UGG	131.5
BNA'S IN SOIL BY GC/MS	AENSLF	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.620 UGG	131.5
BNA'S IN SOIL BY GC/MS	AENSLF	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	AENSLF	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	ALDRN	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	ALDRN	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	ALDRN	BX310515	ZNA	12-JUN-1992	27-JUN-1992	2.000 UGG	143.3
BNA'S IN SOIL BY GC/MS	ALDRN	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	143.3
BNA'S IN SOIL BY GC/MS	ALDRN	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	ALDRN	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	ANAPNE	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.036 UGG	.0
BNA'S IN SOIL BY GC/MS	ANAPNE	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.036 UGG	.0
BNA'S IN SOIL BY GC/MS	ANAPNE	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.200 UGG	139.0
BNA'S IN SOIL BY GC/MS	ANAPNE	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.036 UGG	139.0
BNA'S IN SOIL BY GC/MS	ANAPNE	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.036 UGG	.0
BNA'S IN SOIL BY GC/MS	ANAPNE	BX60340	YLV	10-JUN-1992	23-JUN-1992	0.036 UGG	.0
BNA'S IN SOIL BY GC/MS	ANAPYL	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	ANAPYL	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	ANAPYL	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
BNA'S IN SOIL BY GC/MS	ANAPYL	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	143.3

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BD310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEM	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.059 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEM	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.059 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEM	BD310515	YLV	12-JUN-1992	27-JUN-1992	0.300 UGG	134.3
BNA'S IN SOIL BY GC/MS	LM18	B2CEM	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.059 UGG	134.3
BNA'S IN SOIL BY GC/MS	LM18	B2CEM	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.059 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEM	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.059 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BD310515	YLV	12-JUN-1992	27-JUN-1992	1.000 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.200 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BD310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BD310515	YLV	12-JUN-1992	27-JUN-1992	3.000 UGG	131.5
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.620 UGG	131.5
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BD310515	YLV	12-JUN-1992	27-JUN-1992	0.800 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.170 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.250 UGG	.0

Table F13
Sample Duplicate Quality Control Report
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BD300108	YLY	11-JUN-1992	27-JUN-1992	<	0.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BX310515	YLY	12-JUN-1992	27-JUN-1992	<	1.000 UGG	120.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.250 UGG	120.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BD300108	YLY	11-JUN-1992	27-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BX310515	YLY	12-JUN-1992	27-JUN-1992	<	1.000 UGG	130.6
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.210 UGG	130.6
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BD300108	YLY	11-JUN-1992	27-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BX310515	ZNA	12-JUN-1992	27-JUN-1992	<	2.000 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BD310515	YLY	12-JUN-1992	27-JUN-1992	<	0.270 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BD300108	YLY	11-JUN-1992	27-JUN-1992	<	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BX310515	YLY	12-JUN-1992	27-JUN-1992	<	0.800 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.170 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.170 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BD300108	YLY	11-JUN-1992	27-JUN-1992	<	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BX310515	YLY	12-JUN-1992	27-JUN-1992	<	3.000 UGG	131.5
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.620 UGG	131.5
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.620 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.850 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BD300108	YLY	11-JUN-1992	27-JUN-1992	<	0.850 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BX310515	YLY	12-JUN-1992	27-JUN-1992	<	4.000 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.850 UGG	129.9
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.850 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.850 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOZ	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	6.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOZ	BD300108	YLY	11-JUN-1992	27-JUN-1992	<	6.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BENZOZ	BX310515	YLY	12-JUN-1992	27-JUN-1992	<	30.000 UGG	132.4
BNA'S IN SOIL BY GC/MS	LM18	BENZOZ	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	6.100 UGG	132.4
BNA'S IN SOIL BY GC/MS	LM18	BENZOZ	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	6.100 UGG	.0

Table F13
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	BDG60340	YLV	10-JUN-1992	23-JUN-1992	6.100 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BX310515	YLV	12-JUN-1992	27-JUN-1992	1.000 UGG	120.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.250 UGG	120.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.250 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.066 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.066 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.300 UGG	127.9
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.066 UGG	127.9
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.066 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.066 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BX310515	ZNA	12-JUN-1992	27-JUN-1992	10.000 UGG	192.5
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.190 UGG	192.5
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.120 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.120 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.600 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.120 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.120 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.120 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	6.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BD300108	YLV	11-JUN-1992	27-JUN-1992	6.200 UGG	.0

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Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BX310515	YLX	12-JUN-1992	27-JUN-1992	<	30.000 UGG	131.5
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	6.200 UGG	131.5
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	6.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	6.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.150 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BD300108	YLX	11-JUN-1992	27-JUN-1992	<	0.150 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BD310515	YLX	12-JUN-1992	27-JUN-1992	<	0.800 UGG	136.8
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.150 UGG	136.8
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.150 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.150 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BD300108	YLX	11-JUN-1992	27-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BX310515	YLX	12-JUN-1992	27-JUN-1992	<	1.000 UGG	130.6
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.210 UGG	130.6
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.210 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BD300108	YLX	11-JUN-1992	27-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BX310515	YLX	12-JUN-1992	27-JUN-1992	<	2.000 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.270 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.035 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BD300108	YLX	11-JUN-1992	27-JUN-1992	<	0.035 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BX310515	YLX	12-JUN-1992	27-JUN-1992	<	0.200 UGG	140.4
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.035 UGG	140.4
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.035 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.035 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.240 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	BD300108	YLX	11-JUN-1992	27-JUN-1992	<	0.240 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	BX310515	YLX	12-JUN-1992	27-JUN-1992	<	1.000 UGG	122.6
BNA'S IN SOIL BY GC/MS	LM18	DEP	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.240 UGG	122.6
BNA'S IN SOIL BY GC/MS	LM18	DEP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.240 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DEP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.240 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BD300108	YLX	11-JUN-1992	27-JUN-1992	<	0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BX310515	YLX	12-JUN-1992	27-JUN-1992	<	2.000 UGG	146.3
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.310 UGG	146.3
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	DLDNR	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.310 UGG	.0

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USATHAMMA		IRDMIS		Analysis		RPD	
Method	Test	Sample	Lot	Sample	Date	Value	Units
Code	Name	Number		Date			
Method Description							
BNA'S IN SOIL BY GC/MS	LM18	DMP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DMP	BD300108	YLX	11-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DMP	BX310515	YLX	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DMP	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DMP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DMP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BD300108	YLX	11-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BD310515	YLX	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BD300108	YLX	11-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BD310515	YLX	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BD300108	YLX	11-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BX310515	YLX	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BD300108	YLX	11-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BX310515	YLX	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BD300108	YLX	11-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BX310515	YLX	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ENDRNK	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BD300108	YLX	11-JUN-1992	27-JUN-1992	<
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BX310515	YLX	12-JUN-1992	27-JUN-1992	<

Table F13
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	131.5
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.620 UGG
BNA'S IN SOIL BY GC/MS	LM18	ESFS04	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.620 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.068 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	BD300108	YLV	11-JUN-1992	27-JUN-1992	<	0.068 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	0.300 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	102.3
BNA'S IN SOIL BY GC/MS	LM18	FANT	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	102.3
BNA'S IN SOIL BY GC/MS	LM18	FANT	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.068 UGG
BNA'S IN SOIL BY GC/MS	LM18	FANT	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.068 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.033 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BD300108	YLV	11-JUN-1992	27-JUN-1992	<	0.033 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	0.200 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	143.3
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	143.3
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.033 UGG
BNA'S IN SOIL BY GC/MS	LM18	FLRENE	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.033 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	BD300108	YLV	11-JUN-1992	27-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	2.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	GCLDAN	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	HCB0	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.230 UGG
BNA'S IN SOIL BY GC/MS	LM18	HCB0	BD300108	YLV	11-JUN-1992	27-JUN-1992	<	0.230 UGG
BNA'S IN SOIL BY GC/MS	LM18	HCB0	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	1.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	HCB0	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	125.2
BNA'S IN SOIL BY GC/MS	LM18	HCB0	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	125.2
BNA'S IN SOIL BY GC/MS	LM18	HCB0	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.230 UGG
BNA'S IN SOIL BY GC/MS	LM18	HCB0	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.230 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.130 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BD300108	YLV	11-JUN-1992	27-JUN-1992	<	0.130 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	0.500 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	117.5
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	117.5
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.130 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCL	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.130 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	BX300108	ZNA	11-JUN-1992	26-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	BD300108	YLV	11-JUN-1992	27-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	BX310515	YLV	12-JUN-1992	27-JUN-1992	<	2.000 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	BD310515	ZNA	12-JUN-1992	27-JUN-1992	<	143.3
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	BDG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.330 UGG
BNA'S IN SOIL BY GC/MS	LM18	HPCLE	BXG60340	YLV	10-JUN-1992	23-JUN-1992	<	0.330 UGG

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.290 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.290 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BX310515	YLV	12-JUN-1992	27-JUN-1992	1.000 UGG	110.1
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.290 UGG	110.1
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.290 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ICDPYR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.290 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ISOPHR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	BX310515	YLV	12-JUN-1992	27-JUN-1992	2.000 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	LIN	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.270 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	LIN	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	LIN	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BX310515	YLV	12-JUN-1992	27-JUN-1992	2.000 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.330 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	MEXCLR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.330 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.037 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.037 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	137.6
BNA'S IN SOIL BY GC/MS	LM18	NAP	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.037 UGG	137.6
BNA'S IN SOIL BY GC/MS	LM18	NAP	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.037 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NAP	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.037 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.045 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.045 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	126.5
BNA'S IN SOIL BY GC/MS	LM18	NB	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.045 UGG	126.5
BNA'S IN SOIL BY GC/MS	LM18	NB	BX310515	YLV	10-JUN-1992	23-JUN-1992	0.045 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NB	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.045 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NDMEA	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NDMEA	BX300108	YLV	11-JUN-1992	27-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NDMEA	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.500 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	NDMEA	BX310515	ZNA	12-JUN-1992	27-JUN-1992	0.140 UGG	112.5

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDMEA	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.140 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BX310515	YLV	12-JUN-1992	27-JUN-1992	1.000 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.200 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.200 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BX300108	ZNA	11-JUN-1992	26-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BX310515	ZNA	12-JUN-1992	27-JUN-1992	10.000 UGG	192.5
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.190 UGG	192.5
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BDG60340	YLV	10-JUN-1992	23-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	NNDNPA	BXG60340	YLV	10-JUN-1992	23-JUN-1992	0.190 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BX300108	ZNA	11-JUN-1992	26-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BD300108	YLV	11-JUN-1992	27-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BX310515	ZNA	12-JUN-1992	27-JUN-1992	5.000 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BD310515	ZNA	12-JUN-1992	27-JUN-1992	1.400 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BDG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB016	BXG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BX300108	ZNA	11-JUN-1992	26-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BD300108	YLV	11-JUN-1992	27-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BX310515	ZNA	12-JUN-1992	27-JUN-1992	5.000 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BD310515	ZNA	12-JUN-1992	27-JUN-1992	1.400 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BDG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB221	BXG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BX300108	ZNA	11-JUN-1992	26-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BD300108	YLV	11-JUN-1992	27-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BX310515	ZNA	12-JUN-1992	27-JUN-1992	5.000 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BD310515	ZNA	12-JUN-1992	27-JUN-1992	1.400 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BDG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB232	BXG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BX300108	ZNA	11-JUN-1992	26-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BD300108	YLV	11-JUN-1992	27-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BX310515	ZNA	12-JUN-1992	27-JUN-1992	5.000 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BD310515	ZNA	12-JUN-1992	27-JUN-1992	1.400 UGG	112.5
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BDG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB242	BXG60340	YLV	10-JUN-1992	23-JUN-1992	1.400 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BX300108	ZNA	11-JUN-1992	26-JUN-1992	2.000 UGG	.0

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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BD300108	YLV	11-JUN-1992	27-JUN-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BX310515	YLV	12-JUN-1992	27-JUN-1992	10.000 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BD310515	ZNA	12-JUN-1992	27-JUN-1992	2.000 UGG	133.3
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BD660340	YLV	10-JUN-1992	23-JUN-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB248	BX660340	YLV	10-JUN-1992	23-JUN-1992	2.000 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD300108	ZNA	11-JUN-1992	26-JUN-1992	2.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD300108	YLV	11-JUN-1992	27-JUN-1992	2.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BX310515	YLV	12-JUN-1992	27-JUN-1992	10.000 UGG	125.2
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD310515	ZNA	12-JUN-1992	27-JUN-1992	2.300 UGG	125.2
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BD660340	YLV	10-JUN-1992	23-JUN-1992	2.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB254	BX660340	YLV	10-JUN-1992	23-JUN-1992	2.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD300108	ZNA	11-JUN-1992	26-JUN-1992	2.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD300108	YLV	11-JUN-1992	27-JUN-1992	2.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BX310515	YLV	12-JUN-1992	27-JUN-1992	20.000 UGG	154.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD310515	ZNA	12-JUN-1992	27-JUN-1992	2.600 UGG	154.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BD660340	YLV	10-JUN-1992	23-JUN-1992	2.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCB260	BX660340	YLV	10-JUN-1992	23-JUN-1992	2.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD300108	ZNA	11-JUN-1992	26-JUN-1992	1.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD300108	YLV	11-JUN-1992	27-JUN-1992	1.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BX310515	YLV	12-JUN-1992	27-JUN-1992	6.000 UGG	128.8
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD310515	ZNA	12-JUN-1992	27-JUN-1992	1.300 UGG	128.8
BNA'S IN SOIL BY GC/MS	LM18	PCP	BD660340	YLV	10-JUN-1992	23-JUN-1992	1.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BX660340	YLV	10-JUN-1992	23-JUN-1992	1.300 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.099 UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.033 UGG	100.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.200 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.033 UGG	143.3
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BD660340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHANTR	BX660340	YLV	10-JUN-1992	23-JUN-1992	0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BX310515	YLV	12-JUN-1992	27-JUN-1992	0.600 UGG	138.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.110 UGG	138.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BD660340	YLV	10-JUN-1992	23-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BX660340	YLV	10-JUN-1992	23-JUN-1992	0.110 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD300108	ZNA	11-JUN-1992	26-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD300108	YLV	11-JUN-1992	27-JUN-1992	0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BX310515	YLV	12-JUN-1992	27-JUN-1992	2.000 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD310515	ZNA	12-JUN-1992	27-JUN-1992	0.270 UGG	152.4
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BD660340	YLV	10-JUN-1992	23-JUN-1992	0.270 UGG	.0

Table F13
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
BNA'S IN SOIL BY GC/MS	LM18	PPDDO	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 0.270 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BX300108	ZNA	11-JUN-1992	26-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BX300108	YLV	11-JUN-1992	27-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BX310515	YLV	12-JUN-1992	27-JUN-1992	< 2.000 UGG	146.3
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BX310515	ZNA	12-JUN-1992	27-JUN-1992	< 0.310 UGG	146.3
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDE	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BX300108	ZNA	11-JUN-1992	26-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BX300108	YLV	11-JUN-1992	27-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BX310515	YLV	12-JUN-1992	27-JUN-1992	< 2.000 UGG	146.3
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BX310515	ZNA	12-JUN-1992	27-JUN-1992	< 0.310 UGG	146.3
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PPDDT	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 0.310 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX300108	YLV	11-JUN-1992	27-JUN-1992	< 0.080 UGG	83.2
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX300108	ZNA	11-JUN-1992	26-JUN-1992	< 0.033 UGG	83.2
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX310515	YLV	12-JUN-1992	27-JUN-1992	< 0.200 UGG	92.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX310515	ZNA	12-JUN-1992	27-JUN-1992	< 0.074 UGG	92.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 0.033 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BX300108	ZNA	11-JUN-1992	26-JUN-1992	< 2.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BX300108	YLV	11-JUN-1992	27-JUN-1992	< 2.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BX310515	YLV	12-JUN-1992	27-JUN-1992	< 20.000 UGG	154.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BX310515	ZNA	12-JUN-1992	27-JUN-1992	< 2.600 UGG	154.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 2.600 UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	TXPHEN	BXG60340	YLV	10-JUN-1992	23-JUN-1992	< 2.600 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	111TCE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BXG60340	YSW	12-JUN-1992	23-JUN-1992	< 0.005 UGG	.0

Table F13
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Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.005 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002 UGG	.0

Table F13
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Method Description	USATHAWA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.010 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.100 UGG	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.003 UGG	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

USATHAMMA			Test		IRDMIS		Sample		Analysis		Value		Units		RPD	
Method Description			Method Code		Name		Number		Lot		Date		Date		Date	
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C2H3CL	C2H3CL	BM300108	YSS	11-JUN-1992	20-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM300108	YSY	11-JUN-1992	24-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM661112	ZTF	24-JUN-1992	02-JUL-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H3CL	C2H3CL	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM300108	YSS	11-JUN-1992	20-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM300108	YSY	11-JUN-1992	24-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM661112	ZTF	24-JUN-1992	02-JUL-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
			LM19	C2H5CL	C2H5CL	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.012	UGG	0.012	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM300108	YSS	11-JUN-1992	20-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM300108	YSY	11-JUN-1992	24-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM661112	ZTF	24-JUN-1992	02-JUL-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	C6H6	C6H6	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002	UGG	0.002	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM300108	YSS	11-JUN-1992	20-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM300108	YSY	11-JUN-1992	24-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM310515	YSW	12-JUN-1992	23-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM660340	YSR	10-JUN-1992	18-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM660760	ZTB	24-JUN-1992	30-JUN-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM661112	ZTF	24-JUN-1992	02-JUL-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL3F	CCL3F	BM661112	ZTF	25-JUN-1992	02-JUL-1992	<	0.006	UGG	0.006	UGG	0.0	0.0
VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	VOC'S IN SOIL BY GC/MS	LM19	CCL4	CCL4	BM300108	YSS	11-JUN-1992	20-JUN-1992	<	0.007	UGG	0.007	UGG	0.0	0.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BD300108	YSS	11-JUN-1992	20-JUN-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BD300108	YSW	11-JUN-1992	24-JUN-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.012 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BD300108	YSS	11-JUN-1992	20-JUN-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BD300108	YSW	11-JUN-1992	24-JUN-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.006 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD300108	YSS	11-JUN-1992	20-JUN-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD300108	YSW	11-JUN-1992	24-JUN-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.009 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD300108	YSS	11-JUN-1992	20-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD300108	YSW	11-JUN-1992	24-JUN-1992	<	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.007 UGG	.0

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		minimum							113.2	
		maximum							113.2	
METALS IN WATER BY ICAP	SS10	CA	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	10600.000 UGL	106.0	.9
METALS IN WATER BY ICAP	SS10	CA	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	10500.000 UGL	105.0	.9

		avg							105.5	
		minimum							105.0	
		maximum							106.0	
METALS IN WATER BY ICAP	SS10	CD	D-1-1	YOG	07-APR-1992	23-APR-1992	50.000	46.700 UGL	93.4	1.3
METALS IN WATER BY ICAP	SS10	CD	D-1-1	YOG	07-APR-1992	23-APR-1992	50.000	46.100 UGL	92.2	1.3

		avg							92.8	
		minimum							92.2	
		maximum							93.4	
METALS IN WATER BY ICAP	SS10	CO	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	552.000 UGL	110.4	1.3
METALS IN WATER BY ICAP	SS10	CO	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	545.000 UGL	109.0	1.3

		avg							109.7	
		minimum							109.0	
		maximum							110.4	
METALS IN WATER BY ICAP	SS10	CR	D-1-1	YOG	07-APR-1992	23-APR-1992	200.000	195.000 UGL	97.5	1.0
METALS IN WATER BY ICAP	SS10	CR	D-1-1	YOG	07-APR-1992	23-APR-1992	200.000	193.000 UGL	96.5	1.0

		avg							97.0	
		minimum							96.5	
		maximum							97.5	
METALS IN WATER BY ICAP	SS10	CJ	D-1-1	YOG	07-APR-1992	23-APR-1992	250.000	246.000 UGL	98.4	.8
METALS IN WATER BY ICAP	SS10	CJ	D-1-1	YOG	07-APR-1992	23-APR-1992	250.000	244.000 UGL	97.6	.8

		avg							98.0	
		minimum							97.6	
		maximum							98.4	
METALS IN WATER BY ICAP	SS10	FE	D-1-1	YOG	07-APR-1992	23-APR-1992	1000.000	1100.000 UGL	110.0	1.8
METALS IN WATER BY ICAP	SS10	FE	D-1-1	YOG	07-APR-1992	23-APR-1992	1000.000	1080.000 UGL	108.0	1.8

		avg							109.0	
		minimum							108.0	
		maximum							110.0	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	K	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	11300.000 UGL	113.0	.0
METALS IN WATER BY ICAP	SS10	K	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	11300.000 UGL	113.0	.0

		avg							113.0	
		minimum							113.0	
		maximum							113.0	
METALS IN WATER BY ICAP	SS10	MG	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	10200.000 UGL	102.0	2.0
METALS IN WATER BY ICAP	SS10	MG	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	10000.000 UGL	100.0	2.0

		avg							101.0	
		minimum							100.0	
		maximum							102.0	
METALS IN WATER BY ICAP	SS10	MN	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	508.000 UGL	101.6	1.8
METALS IN WATER BY ICAP	SS10	MN	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	499.000 UGL	99.8	1.8

		avg							100.7	
		minimum							99.8	
		maximum							101.6	
METALS IN WATER BY ICAP	SS10	NA	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	10400.000 UGL	104.0	1.9
METALS IN WATER BY ICAP	SS10	NA	D-1-1	YOG	07-APR-1992	23-APR-1992	10000.000	10200.000 UGL	102.0	1.9

		avg							103.0	
		minimum							102.0	
		maximum							104.0	
METALS IN WATER BY ICAP	SS10	NI	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	552.000 UGL	110.4	.5
METALS IN WATER BY ICAP	SS10	NI	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	549.000 UGL	109.8	.5

		avg							110.1	
		minimum							109.8	
		maximum							110.4	
METALS IN WATER BY ICAP	SS10	V	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	513.000 UGL	102.6	1.2
METALS IN WATER BY ICAP	SS10	V	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	507.000 UGL	101.4	1.2

		avg							102.0	
		minimum							101.4	
		maximum							102.6	
METALS IN WATER BY ICAP	SS10	ZN	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	508.000 UGL	101.6	1.0

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	ZN	D-1-1	YOG	07-APR-1992	23-APR-1992	500.000	503.000 UGL	100.6	1.0

		avg							101.1	
		minimum							100.6	
		maximum							101.6	
NO2, NO3 IN WATER	TF22	NIT	D-1-2	XXH	07-APR-1992	09-APR-1992	150.000	150.000 UGL	100.0	.0
NO2, NO3 IN WATER	TF22	NIT	D-1-2	XXH	07-APR-1992	09-APR-1992	150.000	150.000 UGL	100.0	.0

		avg							100.0	
		minimum							100.0	
		maximum							100.0	
N2KJEL IN WATER	TF26	N2KJEL	D-1-2	SKM	07-APR-1992	22-APR-1992	4000.000	3900.000 UGL	97.5	.0
N2KJEL IN WATER	TF26	N2KJEL	D-1-2	SKM	07-APR-1992	22-APR-1992	4000.000	3900.000 UGL	97.5	.0

		avg							97.5	
		minimum							97.5	
		maximum							97.5	
TOT. PO4 IN WATER	TF27	PO4	D-1-1	RDZ	07-APR-1992	24-APR-1992	385.000	386.000 UGL	100.3	2.6
TOT. PO4 IN WATER	TF27	PO4	D-1-1	RDZ	07-APR-1992	24-APR-1992	385.000	376.000 UGL	97.7	2.6

		avg							99.0	
		minimum							97.7	
		maximum							100.3	
SO4 IN WATER	TT10	CL	D-1-1	XIR	07-APR-1992	13-APR-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	D-1-1	XIR	07-APR-1992	13-APR-1992	25000.000	29000.000 UGL	116.0	.0

		avg							116.0	
		minimum							116.0	
		maximum							116.0	
SO4 IN WATER	TT10	SO4	D-1-1	XIR	07-APR-1992	13-APR-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	D-1-1	XIR	07-APR-1992	13-APR-1992	250000.000	260000.000 UGL	104.0	.0

		avg							104.0	
		minimum							104.0	
		maximum							104.0	

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.007 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.100 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG60340	YSR	10-JUN-1992	18-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BX300108	YSS	11-JUN-1992	20-JUN-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD300108	YSY	11-JUN-1992	24-JUN-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BD310515	YSW	12-JUN-1992	23-JUN-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BDG60340	YSR	10-JUN-1992	18-JUN-1992	0.004 UGG	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	CS2	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.004 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	HEXANE	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.031 UGG	38.5
VOC'S IN SOIL BY GC/MS	LM19	HEXANE	BX310515	YSW	12-JUN-1992	23-JUN-1992	0.021 UGG	38.5
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.002 UGG	66.7
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.001 UGG	66.7
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.070 UGG	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	MEK	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.070 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.027 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.032 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX300108	YSS	11-JUN-1992	20-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BD300108	YSY	11-JUN-1992	24-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BD310515	YSW	12-JUN-1992	23-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BX310515	YSW	12-JUN-1992	23-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BDG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BXG60340	YSR	10-JUN-1992	18-JUN-1992	<	0.003 UGG	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Value Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX300108	YSY	11-JUN-1992	24-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BD310515	YSW	12-JUN-1992	23-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BDG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BD300108	YSY	11-JUN-1992	24-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BD310515	YSW	12-JUN-1992	23-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BXG60760	ZTF	24-JUN-1992	30-JUN-1992	< 0.001 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.004 UGG	120.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.001 UGG	120.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BD300108	YSY	11-JUN-1992	24-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BD310515	YSW	12-JUN-1992	23-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BDG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BDG61112	ZTF	25-JUN-1992	02-JUL-1992	< 0.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX300108	YSS	11-JUN-1992	20-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BD300108	YSY	11-JUN-1992	24-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BD310515	YSW	12-JUN-1992	23-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BX310515	YSW	12-JUN-1992	23-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BDG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BXG60340	YSR	10-JUN-1992	18-JUN-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	< 0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BXG60760	ZTF	24-JUN-1992	30-JUN-1992	< 0.002 UGG	.0

Table F13
Sample Duplicate Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	<	Value Units	RPD
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BXG61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	B0G61112	ZTF	25-JUN-1992	02-JUL-1992	<	0.002 UGG	.0

QA/QC MS/MSD RESULTS

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
	00	TOC	BXG30426	ZWY	29-JUN-1992	11-JUL-1992	1310.000	1330.000 UGG	101.5	25.6
	00	TOC	BXG30426	ZWY	29-JUN-1992	11-JUL-1992	830.000	1090.000 UGG	131.3	25.6

		avg							116.4	
		minimum							101.5	
		maximum							131.3	
	00	TPHC	BX440410	AGM	07-JUL-1992	28-JUL-1992	1160.000	1190.000 UGG	102.6	.0
	00	TPHC	BX440410	AGM	07-JUL-1992	28-JUL-1992	1160.000	1190.000 UGG	102.6	.0
	00	TPHC	BX520105	AGS	30-JUN-1992	22-JUL-1992	1170.000	1150.000 UGG	98.3	1.8
	00	TPHC	BX520105	AGS	30-JUN-1992	22-JUL-1992	1170.000	1130.000 UGG	96.6	1.8
	00	TPHC	BX520405	AGB	30-JUN-1992	27-JUL-1992	1180.000	1160.000 UGG	98.3	.0
	00	TPHC	BX520405	AGB	30-JUN-1992	27-JUL-1992	1180.000	1160.000 UGG	98.3	.0

		avg							99.4	
		minimum							96.6	
		maximum							102.6	
	99	ALK	SBK92112	ASL	29-JUL-1992	12-AUG-1992	44600.000	45000.000 UGL	100.9	2.2
	99	ALK	SBK92112	ASL	29-JUL-1992	12-AUG-1992	44600.000	44000.000 UGL	98.7	2.2

		avg							99.8	
		minimum							98.7	
		maximum							100.9	
	J801	HG	BX440510	ZQO	07-JUL-1992	21-JUL-1992	0.495	0.554 UGG	111.9	17.3
	J801	HG	BX440510	ZQO	07-JUL-1992	21-JUL-1992	0.507	0.477 UGG	94.1	17.3
	J801	HG	BX520405	ZQM	30-JUN-1992	23-JUL-1992	0.510	0.481 UGG	94.3	.2
	J801	HG	BX520405	ZQM	30-JUN-1992	23-JUL-1992	0.494	0.467 UGG	94.5	.2
	J801	HG	BXG30400	ZQF	30-JUN-1992	13-JUL-1992	0.515	0.706 UGG	137.1	27.7
	J801	HG	BXG30400	ZQF	30-JUN-1992	13-JUL-1992	0.515	0.534 UGG	103.7	27.7
	J801	HG	BXG30600	ZQM	06-JUL-1992	23-JUL-1992	0.537	0.550 UGG	102.4	3.9
	J801	HG	BXG30600	ZQM	06-JUL-1992	23-JUL-1992	0.541	0.533 UGG	98.5	3.9

		avg							104.6	
		minimum							94.1	
		maximum							137.1	
SE IN SOIL BY GFAA	JD15	SE	BX440310	ZSJ	08-JUL-1992	05-AUG-1992	4.760	5.110 UGG	107.4	3.0
SE IN SOIL BY GFAA	JD15	SE	BX440310	ZSJ	08-JUL-1992	05-AUG-1992	4.770	4.970 UGG	104.2	3.0
SE IN SOIL BY GFAA	JD15	SE	BX440410	ZSL	07-JUL-1992	05-AUG-1992	4.160	4.350 UGG	104.6	.4

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
SE IN SOIL BY GFAA	JD15	SE	BX440410	ZSL	07-JUL-1992	05-AUG-1992	4.100	4.270 UGG	104.1	.4
SE IN SOIL BY GFAA	JD15	SE	BX520405	ZSJ	30-JUN-1992	05-AUG-1992	3.930	4.500 UGG	114.5	.0
SE IN SOIL BY GFAA	JD15	SE	BX520405	ZSJ	30-JUN-1992	05-AUG-1992	3.920	4.490 UGG	114.5	.0

		avg							108.2	
		minimum							104.1	
		maximum							114.5	
PB IN SOIL BY GFAA	JD17	PB	BX440310	ZXD	08-JUL-1992	05-AUG-1992	4.770	6.300 UGG	132.1	2.5
PB IN SOIL BY GFAA	JD17	PB	BX440310	ZXD	08-JUL-1992	05-AUG-1992	4.760	6.130 UGG	128.8	2.5
PB IN SOIL BY GFAA	JD17	PB	BX440410	ZXF	07-JUL-1992	06-AUG-1992	4.160	5.350 UGG	128.6	25.7
PB IN SOIL BY GFAA	JD17	PB	BX440410	ZXF	07-JUL-1992	06-AUG-1992	4.100	4.070 UGG	99.3	25.7
PB IN SOIL BY GFAA	JD17	PB	BX520405	ZXD	30-JUN-1992	05-AUG-1992	3.930	4.750 UGG	120.9	1.4
PB IN SOIL BY GFAA	JD17	PB	BX520405	ZXD	30-JUN-1992	05-AUG-1992	3.920	4.670 UGG	119.1	1.4

		avg							121.5	
		minimum							99.3	
		maximum							132.1	
AS IN SOIL BY GFAA	JD19	AS	BX440310	Z1T	08-JUL-1992	05-AUG-1992	4.760	10.000 UGG	210.1	73.2
AS IN SOIL BY GFAA	JD19	AS	BX440310	Z1T	08-JUL-1992	05-AUG-1992	4.770	4.650 UGG	97.5	73.2
AS IN SOIL BY GFAA	JD19	AS	BX440410	Z1X	07-JUL-1992	06-AUG-1992	4.160	5.700 UGG	137.0	124.8
AS IN SOIL BY GFAA	JD19	AS	BX440410	Z1X	07-JUL-1992	06-AUG-1992	4.100	1.300 UGG	31.7	124.8
AS IN SOIL BY GFAA	JD19	AS	BX520405	Z1T	30-JUN-1992	05-AUG-1992	3.920	4.000 UGG	102.0	22.5
AS IN SOIL BY GFAA	JD19	AS	BX520405	Z1T	30-JUN-1992	05-AUG-1992	3.930	3.200 UGG	81.4	22.5

		avg							110.0	
		minimum							31.7	
		maximum							210.1	
TL IN SOIL BY GFAA	JD24	TL	BX440310	Z1D	08-JUL-1992	05-AUG-1992	4.770	5.240 UGG	109.9	1.3
TL IN SOIL BY GFAA	JD24	TL	BX440310	Z1D	08-JUL-1992	05-AUG-1992	4.760	5.160 UGG	108.4	1.3
TL IN SOIL BY GFAA	JD24	TL	BX440410	Z1E	07-JUL-1992	06-AUG-1992	4.160	4.600 UGG	110.6	.5
TL IN SOIL BY GFAA	JD24	TL	BX440410	Z1E	07-JUL-1992	06-AUG-1992	4.100	4.510 UGG	110.0	.5
TL IN SOIL BY GFAA	JD24	TL	BX520405	Z1D	30-JUN-1992	05-AUG-1992	3.930	4.410 UGG	112.2	2.7
TL IN SOIL BY GFAA	JD24	TL	BX520405	Z1D	30-JUN-1992	05-AUG-1992	3.920	4.280 UGG	109.2	2.7

		avg							110.0	
		minimum							108.4	
		maximum							112.2	

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
SB IN SOIL BY GFAA	JD25	SB	BX440310	ZMD	08-JUL-1992	05-AUG-1992	10.000	11.500 UGG	115.0	1.4
SB IN SOIL BY GFAA	JD25	SB	BX440310	ZMD	08-JUL-1992	05-AUG-1992	9.520	10.800 UGG	113.4	1.4
SB IN SOIL BY GFAA	JD25	SB	BX440410	ZME	07-JUL-1992	06-AUG-1992	8.230	9.330 UGG	113.4	.5
SB IN SOIL BY GFAA	JD25	SB	BX440410	ZME	07-JUL-1992	06-AUG-1992	8.100	9.140 UGG	112.8	.5
SB IN SOIL BY GFAA	JD25	SB	BX520405	ZMD	30-JUN-1992	05-AUG-1992	8.220	9.170 UGG	111.6	.6
SB IN SOIL BY GFAA	JD25	SB	BX520405	ZMD	30-JUN-1992	05-AUG-1992	8.150	9.150 UGG	112.3	.6

		avg							113.1	
		minimum							111.6	
		maximum							115.0	
METALS IN SOIL BY ICAP	JS16	AG	BX440310	ZJN	08-JUL-1992	21-JUL-1992	9.270	8.650 UGG	93.3	3.3
METALS IN SOIL BY ICAP	JS16	AG	BX440310	ZJN	08-JUL-1992	21-JUL-1992	9.380	8.470 UGG	90.3	3.3
METALS IN SOIL BY ICAP	JS16	AG	BX440410	ZJP	07-JUL-1992	23-JUL-1992	8.330	7.640 UGG	91.7	1.2
METALS IN SOIL BY ICAP	JS16	AG	BX440410	ZJP	07-JUL-1992	23-JUL-1992	7.990	7.240 UGG	90.6	1.2
METALS IN SOIL BY ICAP	JS16	AG	BX520210	ZJG	30-JUN-1992	08-JUL-1992	8.660	8.320 UGG	96.1	1.7
METALS IN SOIL BY ICAP	JS16	AG	BX520210	ZJG	30-JUN-1992	08-JUL-1992	8.690	8.210 UGG	94.5	1.7
METALS IN SOIL BY ICAP	JS16	AG	BX520405	ZJN	30-JUN-1992	21-JUL-1992	8.360	7.670 UGG	91.7	1.5
METALS IN SOIL BY ICAP	JS16	AG	BX520405	ZJN	30-JUN-1992	21-JUL-1992	7.880	7.340 UGG	93.1	1.5

		avg							92.7	
		minimum							90.3	
		maximum							96.1	
METALS IN SOIL BY ICAP	JS16	BE	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.000	60.000 UGG	103.4	1.4
METALS IN SOIL BY ICAP	JS16	BE	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.600	59.800 UGG	102.0	1.4
METALS IN SOIL BY ICAP	JS16	BE	BX440410	ZJP	07-JUL-1992	23-JUL-1992	52.100	53.600 UGG	102.9	1.2
METALS IN SOIL BY ICAP	JS16	BE	BX440410	ZJP	07-JUL-1992	23-JUL-1992	49.900	50.700 UGG	101.6	1.2
METALS IN SOIL BY ICAP	JS16	BE	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.300	55.400 UGG	102.0	.2
METALS IN SOIL BY ICAP	JS16	BE	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.200	55.400 UGG	102.2	.2
METALS IN SOIL BY ICAP	JS16	BE	BX520405	ZJN	30-JUN-1992	21-JUL-1992	52.300	54.200 UGG	103.6	1.0
METALS IN SOIL BY ICAP	JS16	BE	BX520405	ZJN	30-JUN-1992	21-JUL-1992	49.200	51.500 UGG	104.7	1.0

		avg							102.8	
		minimum							101.6	
		maximum							104.7	
METALS IN SOIL BY ICAP	JS16	CD	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.000	61.000 UGG	105.2	2.0
METALS IN SOIL BY ICAP	JS16	CD	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.600	60.400 UGG	103.1	2.0
METALS IN SOIL BY ICAP	JS16	CD	BX440410	ZJP	07-JUL-1992	23-JUL-1992	52.100	53.600 UGG	102.9	1.1
METALS IN SOIL BY ICAP	JS16	CD	BX440410	ZJP	07-JUL-1992	23-JUL-1992	49.900	50.800 UGG	101.8	1.1
METALS IN SOIL BY ICAP	JS16	CD	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.300	55.800 UGG	102.8	.2

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHANA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	CD	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.200	55.800 UGG	103.0	2
METALS IN SOIL BY ICAP	JS16	CD	BX520405	ZJN	30-JUN-1992	21-JUL-1992	52.300	54.400 UGG	104.0	1.4
METALS IN SOIL BY ICAP	JS16	CD	BX520405	ZJN	30-JUN-1992	21-JUL-1992	49.200	51.900 UGG	105.5	1.4

		avg							103.5	
		minimum							101.8	
		maximum							105.5	
METALS IN SOIL BY ICAP	JS16	CR	BX440310	ZJN	08-JUL-1992	21-JUL-1992	117.000	123.000 UGG	105.1	1.6
METALS IN SOIL BY ICAP	JS16	CR	BX440310	ZJN	08-JUL-1992	21-JUL-1992	116.000	120.000 UGG	103.4	1.6
METALS IN SOIL BY ICAP	JS16	CR	BX440410	ZJP	07-JUL-1992	23-JUL-1992	104.000	113.000 UGG	108.7	1.4
METALS IN SOIL BY ICAP	JS16	CR	BX440410	ZJP	07-JUL-1992	23-JUL-1992	99.900	107.000 UGG	107.1	1.4
METALS IN SOIL BY ICAP	JS16	CR	BX520210	ZJG	30-JUN-1992	08-JUL-1992	108.000	116.000 UGG	107.4	1.8
METALS IN SOIL BY ICAP	JS16	CR	BX520210	ZJG	30-JUN-1992	08-JUL-1992	109.000	115.000 UGG	105.5	1.8
METALS IN SOIL BY ICAP	JS16	CR	BX520405	ZJN	30-JUN-1992	21-JUL-1992	105.000	114.000 UGG	108.6	2.8
METALS IN SOIL BY ICAP	JS16	CR	BX520405	ZJN	30-JUN-1992	21-JUL-1992	98.500	110.000 UGG	111.7	2.8

		avg							107.2	
		minimum							103.4	
		maximum							111.7	
METALS IN SOIL BY ICAP	JS16	CJ	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.600	56.700 UGG	96.8	1
METALS IN SOIL BY ICAP	JS16	CJ	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.000	56.200 UGG	96.9	1
METALS IN SOIL BY ICAP	JS16	CJ	BX440410	ZJP	07-JUL-1992	23-JUL-1992	52.100	54.800 UGG	105.2	3.3
METALS IN SOIL BY ICAP	JS16	CJ	BX440410	ZJP	07-JUL-1992	23-JUL-1992	49.900	50.800 UGG	101.8	3.3
METALS IN SOIL BY ICAP	JS16	CJ	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.300	53.600 UGG	98.7	1.1
METALS IN SOIL BY ICAP	JS16	CJ	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.200	52.900 UGG	97.6	1.1
METALS IN SOIL BY ICAP	JS16	CJ	BX520405	ZJN	30-JUN-1992	21-JUL-1992	52.300	52.700 UGG	100.8	3.4
METALS IN SOIL BY ICAP	JS16	CJ	BX520405	ZJN	30-JUN-1992	21-JUL-1992	49.200	51.300 UGG	104.3	3.4

		avg							100.2	
		minimum							96.8	
		maximum							105.2	
METALS IN SOIL BY ICAP	JS16	NI	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.600	61.300 UGG	104.6	1.8
METALS IN SOIL BY ICAP	JS16	NI	BX440310	ZJN	08-JUL-1992	21-JUL-1992	58.000	59.600 UGG	102.8	1.8
METALS IN SOIL BY ICAP	JS16	NI	BX440410	ZJP	07-JUL-1992	23-JUL-1992	52.100	56.600 UGG	108.6	2.3
METALS IN SOIL BY ICAP	JS16	NI	BX440410	ZJP	07-JUL-1992	23-JUL-1992	49.900	53.000 UGG	106.2	2.3
METALS IN SOIL BY ICAP	JS16	NI	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.300	56.400 UGG	103.9	2
METALS IN SOIL BY ICAP	JS16	NI	BX520210	ZJG	30-JUN-1992	08-JUL-1992	54.200	56.200 UGG	103.7	2
METALS IN SOIL BY ICAP	JS16	NI	BX520405	ZJN	30-JUN-1992	21-JUL-1992	52.300	57.400 UGG	109.8	4.0
METALS IN SOIL BY ICAP	JS16	NI	BX520405	ZJN	30-JUN-1992	21-JUL-1992	49.200	56.200 UGG	114.2	4.0

		avg							106.7	

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		minimum							102.8	
		maximum							114.2	
METALS IN SOIL BY ICAP	JS16	ZN	BX440310	ZJN	08-JUL-1992	21-JUL-1992	117.000	123.000 UGG	105.1	.9
METALS IN SOIL BY ICAP	JS16	ZN	BX440310	ZJN	08-JUL-1992	21-JUL-1992	116.000	123.000 UGG	106.0	.9
METALS IN SOIL BY ICAP	JS16	ZN	BX440410	ZJP	07-JUL-1992	23-JUL-1992	104.000	112.000 UGG	107.7	.5
METALS IN SOIL BY ICAP	JS16	ZN	BX440410	ZJP	07-JUL-1992	23-JUL-1992	99.900	107.000 UGG	107.1	.5
METALS IN SOIL BY ICAP	JS16	ZN	BX520210	ZJG	30-JUN-1992	08-JUL-1992	108.000	116.000 UGG	107.4	2.7
METALS IN SOIL BY ICAP	JS16	ZN	BX520210	ZJG	30-JUN-1992	08-JUL-1992	109.000	114.000 UGG	104.6	2.7
METALS IN SOIL BY ICAP	JS16	ZN	BX520405	ZJN	30-JUN-1992	21-JUL-1992	105.000	112.000 UGG	106.7	4.6
METALS IN SOIL BY ICAP	JS16	ZN	*****	ZJN	30-JUN-1992	21-JUL-1992	98.500	110.000 UGG	111.7	4.6
		avg							-----	
		minimum							107.0	
		maximum							104.6	
									111.7	
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	4.330 UGG	123.7	3.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	4.200 UGG	120.0	3.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	3.950 UGG	112.9	.0
BNA'S IN SOIL BY GC/MS	LM18	124TCB	*****	ZNL	01-JUL-1992	28-JUL-1992	3.500	3.950 UGG	112.9	.0
		avg							-----	
		minimum							117.4	
		maximum							112.9	
									123.7	
BNA'S IN SOIL BY GC/MS	LM18	140CLB	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	5.000 UGG	142.9	3.0
BNA'S IN SOIL BY GC/MS	LM18	140CLB	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	4.850 UGG	138.6	3.0
BNA'S IN SOIL BY GC/MS	LM18	140CLB	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	4.430 UGG	126.6	.0
BNA'S IN SOIL BY GC/MS	LM18	140CLB	*****	ZNL	01-JUL-1992	28-JUL-1992	3.500	4.430 UGG	126.6	.0
		avg							-----	
		minimum							133.6	
		maximum							126.6	
									142.9	
BNA'S IN SOIL BY GC/MS	LM18	246TBP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	8.680 UGG	129.6	18.3
BNA'S IN SOIL BY GC/MS	LM18	246TBP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	7.470 UGG	111.5	18.3
BNA'S IN SOIL BY GC/MS	LM18	246TBP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	7.250 UGG	108.2	18.3
BNA'S IN SOIL BY GC/MS	LM18	246TBP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	6.040 UGG	90.1	7.6
BNA'S IN SOIL BY GC/MS	LM18	246TBP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	5.820 UGG	86.9	7.6
BNA'S IN SOIL BY GC/MS	LM18	246TBP	*****	ZNL	01-JUL-1992	28-JUL-1992	6.700	5.600 UGG	83.6	7.6
		avg							-----	
		minimum							101.6	
		maximum							83.6	

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		maximum							129.6	
BNA'S IN SOIL BY GC/MS	LM18	24DNT	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	3.930 UGG	112.3	2.8
BNA'S IN SOIL BY GC/MS	LM18	24DNT	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	3.820 UGG	109.1	2.8
BNA'S IN SOIL BY GC/MS	LM18	24DNT	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	3.380 UGG	96.6	18.1
BNA'S IN SOIL BY GC/MS	LM18	24DNT	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	2.820 UGG	80.6	18.1

		avg							99.6	
		minimum							80.6	
		maximum							112.3	
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	9.740 UGG	139.1	7.6
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	9.030 UGG	129.0	7.6
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	7.090 UGG	101.3	.0
BNA'S IN SOIL BY GC/MS	LM18	2CLP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	7.090 UGG	101.3	.0

		avg							117.7	
		minimum							101.3	
		maximum							139.1	
BNA'S IN SOIL BY GC/MS	LM18	2FBP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	3.650 UGG	110.6	6.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	3.540 UGG	107.3	6.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	3.430 UGG	103.9	6.2
BNA'S IN SOIL BY GC/MS	LM18	2FBP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.320 UGG	100.6	6.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.210 UGG	97.3	6.9
BNA'S IN SOIL BY GC/MS	LM18	2FBP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.100 UGG	93.9	6.9

		avg							102.3	
		minimum							93.9	
		maximum							110.6	
BNA'S IN SOIL BY GC/MS	LM18	2FP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	8.330 UGG	124.3	9.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	8.330 UGG	124.3	9.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	7.530 UGG	112.4	9.9
BNA'S IN SOIL BY GC/MS	LM18	2FP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	7.930 UGG	118.4	7.1
BNA'S IN SOIL BY GC/MS	LM18	2FP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	7.530 UGG	112.4	7.1
BNA'S IN SOIL BY GC/MS	LM18	2FP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	7.390 UGG	110.3	7.1

		avg							117.0	
		minimum							110.3	
		maximum							124.3	
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	8.230 UGG	117.6	2.8
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	8.000 UGG	114.3	2.8

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
BNAS IN SOIL BY GC/MS	LM18	4CL3C	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	5.910 UGG	84.4	.0
BNAS IN SOIL BY GC/MS	LM18	4CL3C	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	5.910 UGG	84.4	.0

		avg							100.2	
		minimum							84.4	
		maximum							117.6	
BNAS IN SOIL BY GC/MS	LM18	4NP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	8.330 UGG	119.0	10.0
BNAS IN SOIL BY GC/MS	LM18	4NP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	7.540 UGG	107.7	10.0
BNAS IN SOIL BY GC/MS	LM18	4NP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	7.000 UGG	100.0	.0
BNAS IN SOIL BY GC/MS	LM18	4NP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	7.000 UGG	100.0	.0

		avg							106.7	
		minimum							100.0	
		maximum							119.0	
BNAS IN SOIL BY GC/MS	LM18	ANAPNE	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	4.200 UGG	120.0	.0
BNAS IN SOIL BY GC/MS	LM18	ANAPNE	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	4.200 UGG	120.0	.0
BNAS IN SOIL BY GC/MS	LM18	ANAPNE	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	3.840 UGG	109.7	.0
BNAS IN SOIL BY GC/MS	LM18	ANAPNE	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	3.840 UGG	109.7	.0

		avg							114.9	
		minimum							109.7	
		maximum							120.0	
BNAS IN SOIL BY GC/MS	LM18	NBD5	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	3.850 UGG	116.7	3.1
BNAS IN SOIL BY GC/MS	LM18	NBD5	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	3.850 UGG	116.7	3.1
BNAS IN SOIL BY GC/MS	LM18	NBD5	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	3.730 UGG	113.0	3.1
BNAS IN SOIL BY GC/MS	LM18	NBD5	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.500 UGG	106.1	3.5
BNAS IN SOIL BY GC/MS	LM18	NBD5	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.500 UGG	106.1	3.5
BNAS IN SOIL BY GC/MS	LM18	NBD5	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.380 UGG	102.4	3.5

		avg							110.2	
		minimum							102.4	
		maximum							116.7	
BNAS IN SOIL BY GC/MS	LM18	NNDNPA	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	3.470 UGG	99.1	7.5
BNAS IN SOIL BY GC/MS	LM18	NNDNPA	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	3.220 UGG	92.0	7.5
BNAS IN SOIL BY GC/MS	LM18	NNDNPA	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	4.350 UGG	124.3	15.3
BNAS IN SOIL BY GC/MS	LM18	NNDNPA	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	3.730 UGG	106.6	15.3

		avg							105.5	
		minimum							92.0	
		maximum							124.3	

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
BNA'S IN SOIL BY GC/MS	LM18	PCP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	11.000 UGG	157.1	11.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	9.850 UGG	140.7	11.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	6.500 UGG	92.9	.0
BNA'S IN SOIL BY GC/MS	LM18	PCP	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	6.500 UGG	92.9	.0

		avg							120.9	
		minimum							92.9	
		maximum							157.1	
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	7.890 UGG	117.8	16.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	7.160 UGG	106.9	16.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	BX520405	ZNM	30-JUN-1992	24-JUL-1992	6.700	6.670 UGG	99.6	16.9
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	7.400 UGG	110.4	1.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	7.280 UGG	108.7	1.6
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	BX520810	ZNL	01-JUL-1992	28-JUL-1992	6.700	7.280 UGG	108.7	1.6

		avg							108.7	
		minimum							99.6	
		maximum							117.8	
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	8.170 UGG	116.7	6.6
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BX520405	ZNM	30-JUN-1992	24-JUL-1992	7.000	7.650 UGG	109.3	6.6
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	6.510 UGG	93.0	.0
BNA'S IN SOIL BY GC/MS	LM18	PHENOL	BX520810	ZNL	01-JUL-1992	28-JUL-1992	7.000	6.510 UGG	93.0	.0

		avg							103.0	
		minimum							93.0	
		maximum							116.7	
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	3.240 UGG	92.6	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.500	3.240 UGG	92.6	.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	5.620 UGG	160.6	25.0
BNA'S IN SOIL BY GC/MS	LM18	PYR	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.500	4.370 UGG	124.9	25.0

		avg							117.6	
		minimum							92.6	
		maximum							160.6	
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	2.900 UGG	87.9	22.2
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	2.340 UGG	70.9	22.2
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	BX520405	ZNM	30-JUN-1992	24-JUL-1992	3.300	2.340 UGG	70.9	22.2
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.550 UGG	107.6	14.5
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.080 UGG	93.3	14.5

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	BX520810	ZNL	01-JUL-1992	28-JUL-1992	3.300	3.080 UGG	93.3	14.5

		avg							87.3	
		minimum							70.9	
		maximum							107.6	
HG IN WATER BY CVAA	SB01	HG	WXG301XX	YVP	23-JUN-1992	15-JUL-1992	5.000	4.520 UGL	90.4	.0
HG IN WATER BY CVAA	SB01	HG	WXG301XX	YVP	23-JUN-1992	15-JUL-1992	5.000	4.520 UGL	90.4	.0

		avg							90.4	
		minimum							90.4	
		maximum							90.4	
TL IN WATER BY GFAA	SD09	TL	SBK92112	ZKL	29-JUL-1992	02-SEP-1992	10.000	11.300 UGL	113.0	2.7
TL IN WATER BY GFAA	SD09	TL	SBK92112	ZKL	29-JUL-1992	02-SEP-1992	10.000	11.000 UGL	110.0	2.7

		avg							111.5	
		minimum							110.0	
		maximum							113.0	
PB IN WATER BY GFAA	SD20	PB	SBK92112	ZUM	29-JUL-1992	03-SEP-1992	40.000	47.700 UGL	119.3	11.1
PB IN WATER BY GFAA	SD20	PB	SBK92112	ZUM	29-JUL-1992	03-SEP-1992	40.000	42.700 UGL	106.8	11.1

		avg							113.0	
		minimum							106.8	
		maximum							119.3	
SE IN WATER BY GFAA	SD21	SE	SBK92112	ZGS	29-JUL-1992	10-SEP-1992	37.500	40.100 UGL	106.9	1.8
SE IN WATER BY GFAA	SD21	SE	SBK92112	ZGS	29-JUL-1992	10-SEP-1992	37.500	39.400 UGL	105.1	1.8

		avg							106.0	
		minimum							105.1	
		maximum							106.9	
AS IN WATER BY GFAA	SD22	AS	SBK92112	AAH	29-JUL-1992	07-SEP-1992	37.500	37.700 UGL	100.5	.3
AS IN WATER BY GFAA	SD22	AS	SBK92112	AAH	29-JUL-1992	07-SEP-1992	37.500	37.600 UGL	100.3	.3

		avg							100.4	
		minimum							100.3	

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
								100.5	
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	50.000	49.000 UGL	98.0	1.4
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	50.000	48.300 UGL	96.6	1.4
		*****						97.3	
		avg						96.6	
		minimum						98.0	
		maximum							
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	2000.000	1920.000 UGL	96.0	1.6
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	2000.000	1890.000 UGL	94.5	1.6
		*****						95.3	
		avg						94.5	
		minimum						96.0	
		maximum							
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	2000.000	1750.000 UGL	87.5	1.1
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	2000.000	1730.000 UGL	86.5	1.1
		*****						87.0	
		avg						86.5	
		minimum						87.5	
		maximum							
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	50.000	53.600 UGL	107.2	2.1
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	50.000	52.500 UGL	105.0	2.1
		*****						106.1	
		avg						105.0	
		minimum						107.2	
		maximum							
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	10300.000 UGL	103.0	2.0
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	10100.000 UGL	101.0	2.0
		*****						102.0	
		avg						101.0	
		minimum						103.0	
		maximum							
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	50.000	49.200 UGL	98.4	2.9
METALS IN WATER BY ICAP	SS10	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	50.000	47.800 UGL	95.6	2.9
		*****						97.0	
		avg						95.6	
		minimum						98.4	
		maximum							

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	CO	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	554.000	UGL	110.8	3.3
METALS IN WATER BY ICAP	SS10	CO	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	536.000	UGL	107.2	3.3

		avg								109.0	
		minimum								107.2	
		maximum								110.8	
METALS IN WATER BY ICAP	SS10	CR	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	200.000	191.000	UGL	95.5	2.1
METALS IN WATER BY ICAP	SS10	CR	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	200.000	187.000	UGL	93.5	2.1

		avg								94.5	
		minimum								93.5	
		maximum								95.5	
METALS IN WATER BY ICAP	SS10	CU	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	250.000	245.000	UGL	98.0	2.1
METALS IN WATER BY ICAP	SS10	CU	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	250.000	240.000	UGL	96.0	2.1

		avg								97.0	
		minimum								96.0	
		maximum								98.0	
METALS IN WATER BY ICAP	SS10	FE	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	1000.000	1020.000	UGL	102.0	4.9
METALS IN WATER BY ICAP	SS10	FE	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	1000.000	971.000	UGL	97.1	4.9

		avg								99.6	
		minimum								97.1	
		maximum								102.0	
METALS IN WATER BY ICAP	SS10	K	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	10900.000	UGL	109.0	3.7
METALS IN WATER BY ICAP	SS10	K	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	10500.000	UGL	105.0	3.7

		avg								107.0	
		minimum								105.0	
		maximum								109.0	
METALS IN WATER BY ICAP	SS10	MG	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	9760.000	UGL	97.6	1.7
METALS IN WATER BY ICAP	SS10	MG	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	9600.000	UGL	96.0	1.7

		avg								96.8	
		minimum								96.0	
		maximum								97.6	
METALS IN WATER BY ICAP	SS10	MN	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	491.000	UGL	98.2	1.2

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	NI ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	485.000 UGL	97.0 97.6 97.0 98.2	1.2
METALS IN WATER BY ICAP	SS10	NA ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	9960.000 UGL	99.6 98.6	1.0
METALS IN WATER BY ICAP	SS10	NI ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	10000.000	9860.000 UGL	99.1 98.6 99.6	1.0
METALS IN WATER BY ICAP	SS10	NI ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	557.000 UGL	111.4 109.6	1.6
METALS IN WATER BY ICAP	SS10	V ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	504.000 UGL	100.8 99.6	1.2
METALS IN WATER BY ICAP	SS10	ZN ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	498.000 UGL	100.2 99.6 100.8	1.2
METALS IN WATER BY ICAP	SS10	ZN ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	512.000 UGL	102.4 99.8	2.6
METALS IN WATER BY ICAP	SS10	ZN ***** avg minimum maximum	SBK92112	ZZJ	29-JUL-1992	19-AUG-1992	500.000	499.000 UGL	101.1 99.8 102.4	2.6
BNA'S IN WATER BY GC/MS	UM18	2461BP ***** avg minimum maximum	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	100.000	42.100 UGL	42.1 13.0	105.6
BNA'S IN WATER BY GC/MS	UM18	2461BP ***** avg minimum maximum	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	100.000	13.000 UGL	27.6 13.0 42.1	105.6
BNA'S IN WATER BY GC/MS	UM18	2FBP ***** avg minimum maximum	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	50.000	39.300 UGL	78.6 65.0	18.9
BNA'S IN WATER BY GC/MS	UM18	2FBP ***** avg minimum maximum	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	50.000	32.500 UGL	18.9 18.9	18.9

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		***** avg minimum maximum							71.8 65.0 78.6	
BNA'S IN WATER BY GC/MS	UM18	2FP	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	100.000	82.200 UGL	82.2	131.5
BNA'S IN WATER BY GC/MS	UM18	2FP	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	100.000	17.000 UGL	17.0	131.5
		***** avg minimum maximum							49.6 17.0 82.2	
BNA'S IN WATER BY GC/MS	UM18	NBD5	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	50.000	40.200 UGL	80.4	9.1
BNA'S IN WATER BY GC/MS	UM18	NBD5	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	50.000	36.700 UGL	73.4	9.1
		***** avg minimum maximum							76.9 73.4 80.4	
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	100.000	78.000 UGL	78.0	73.7
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	100.000	36.000 UGL	36.0	73.7
		***** avg minimum maximum							57.0 36.0 78.0	
BNA'S IN WATER BY GC/MS	UM18	TRPD14	MXG303X1	ZRP	29-JUL-1992	19-AUG-1992	50.000	49.000 UGL	98.0	7.2
BNA'S IN WATER BY GC/MS	UM18	TRPD14	MXG303X1	ZRP	28-JUL-1992	19-AUG-1992	50.000	45.600 UGL	91.2	7.2
		***** avg minimum maximum							94.6 91.2 98.0	
VOC'S IN WATER BY GC/MS	UM20	12DCD4	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	50.000	56.800 UGL	113.6	.0
VOC'S IN WATER BY GC/MS	UM20	12DCD4	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	50.000	56.800 UGL	113.6	.0
VOC'S IN WATER BY GC/MS	UM20	12DCD4	SBK92107	ZPG	09-JUL-1992	14-JUL-1992	50.000	54.000 UGL	108.0	1.9
VOC'S IN WATER BY GC/MS	UM20	12DCD4	SBK92107	ZPG	07-JUL-1992	14-JUL-1992	50.000	53.000 UGL	106.0	1.9
		***** avg minimum maximum							110.3 106.0 113.6	
VOC'S IN WATER BY GC/MS	UM20	48FB	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	50.000	45.000 UGL	90.0	4.1

TABLE F8
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 3
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
VOC'S IN WATER BY GC/MS	UM20	48FB	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	50.000	43.200 UGL	86.4	4.1
VOC'S IN WATER BY GC/MS	UM20	48FB	SBK92107	ZPG	09-JUL-1992	14-JUL-1992	50.000	44.000 UGL	88.0	2.3
VOC'S IN WATER BY GC/MS	UM20	48FB	SBK92107	ZPG	07-JUL-1992	14-JUL-1992	50.000	43.000 UGL	86.0	2.3

		avg							87.6	
		minimum							86.0	
		maximum							90.0	
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG303X1	ZPR	29-JUL-1992	03-AUG-1992	50.000	46.200 UGL	92.4	4.2
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG303X1	ZPR	28-JUL-1992	03-AUG-1992	50.000	44.300 UGL	88.6	4.2
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK92107	ZPG	09-JUL-1992	14-JUL-1992	50.000	45.000 UGL	90.0	2.2
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK92107	ZPG	07-JUL-1992	14-JUL-1992	50.000	44.000 UGL	88.0	2.2

		avg							89.8	
		minimum							88.0	
		maximum							92.4	

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
JB01	JB01	HG	ED090208	ZQ0	07-JUL-1992	21-JUL-1992	0.564	0.555 UGG	98.4	3.4
		HG	ED090208	ZQ0	07-JUL-1992	21-JUL-1992	0.578	0.550 UGG	95.2	3.4

		avg							96.8	
JD15	JD15	SE	DDG50500	ZSA	18-JUN-1992	17-JUL-1992	5.890	4.560 UGG	77.4	8.4
		SE	DDG50500	ZSA	18-JUN-1992	17-JUL-1992	5.860	4.170 UGG	71.2	8.4
		SE	EX090104	ZSL	07-JUL-1992	05-AUG-1992	4.110	3.640 UGG	88.6	14.5
		SE	EX090104	ZSL	07-JUL-1992	05-AUG-1992	4.100	3.140 UGG	76.6	14.5
JD17	JD17	*****								
		avg							78.4	
		minimum							71.2	
		maximum							88.6	
JD17	JD17	PB	DDG50500	ZAT	18-JUN-1992	17-JUL-1992	5.890	43.000 UGG	730.1	81.5
		PB	DDG50500	ZAT	18-JUN-1992	17-JUL-1992	5.860	18.000 UGG	307.2	81.5
		PB	EX090104	ZXF	07-JUL-1992	06-AUG-1992	4.110	120.000 UGG	2919.7	122.0
		PB	EX090104	ZXF	07-JUL-1992	06-AUG-1992	4.100	29.000 UGG	707.3	122.0
JD19	JD19	*****								
		avg							1166.1	
		minimum							307.2	
		maximum							2919.7	
JD19	JD19	AS	DDG50500	ZIK	18-JUN-1992	28-JUL-1992	5.860	5.780 UGG	98.6	.9
		AS	DDG50500	ZIK	18-JUN-1992	28-JUL-1992	5.890	5.760 UGG	97.8	.9
		AS	EX090104	ZIX	07-JUL-1992	06-AUG-1992	4.110	8.000 UGG	194.6	55.8
		AS	EX090104	ZIX	07-JUL-1992	06-AUG-1992	4.100	4.500 UGG	109.8	55.8
JD24	JD24	*****								
		avg							125.2	
		minimum							97.8	
		maximum							194.6	
JD24	JD24	TL	DDG50500	ZLC	18-JUN-1992	20-JUL-1992	5.860	6.210 UGG	106.0	1.3
		TL	DDG50500	ZLC	18-JUN-1992	20-JUL-1992	5.890	6.160 UGG	104.6	1.3
		TL	EX090104	ZLE	07-JUL-1992	06-AUG-1992	4.100	4.270 UGG	104.1	2.6
		TL	EX090104	ZLE	07-JUL-1992	06-AUG-1992	4.110	4.170 UGG	101.5	2.6

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Sample	Analysis	Spike	Value	Units	Percent		
Code	Name	Number	Date	Value			Recovery	RPD	
Method Description		Lot	Sample Date						
	avg						104.0		
	minimum						101.5		
	maximum						106.0		
JD25	SB	DDG50500	18-JUN-1992	11.600	10.200	UGG	87.9	.6	
JD25	SB	DDG50500	18-JUN-1992	10.900	9.640	UGG	88.4	.6	
JD25	SB	EX090104	07-JUL-1992	8.180	9.610	UGG	117.5	5.7	
JD25	SB	EX090104	07-JUL-1992	8.230	9.130	UGG	110.9	5.7	
	*****		06-AUG-1992						
	avg						101.2		
	minimum						87.9		
	maximum						117.5		
JS16	AG	EX090104	07-JUL-1992	8.300	7.600	UGG	91.6	3.1	
JS16	AG	EX090104	07-JUL-1992	8.380	7.440	UGG	88.8	3.1	

	avg						90.2		
	minimum						88.8		
	maximum						91.6		
JS16	BE	EX090104	07-JUL-1992	52.400	54.200	UGG	103.4	.2	
JS16	BE	EX090104	07-JUL-1992	51.900	53.800	UGG	103.7	.2	

	avg						103.5		
	minimum						103.4		
	maximum						103.7		
JS16	CD	EX090104	07-JUL-1992	51.900	53.700	UGG	103.5	1.9	
JS16	CD	EX090104	07-JUL-1992	52.400	53.200	UGG	101.5	1.9	

	avg						102.5		
	minimum						101.5		
	maximum						103.5		
JS16	CR	EX090104	07-JUL-1992	104.000	111.000	UGG	106.7	1.9	
JS16	CR	EX090104	07-JUL-1992	105.000	110.000	UGG	104.8	1.9	

	avg						105.7		
	minimum						104.8		
	maximum						106.7		
JS16	CU	EX090104	07-JUL-1992	51.900	83.400	UGG	160.7	32.6	

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	CU	EX090104	ZJP	07-JUL-1992	23-JUL-1992	52.400	60.600 UGG	115.6	32.6

		avg							138.2	
		minimum							115.6	
		maximum							160.7	
METALS IN SOIL BY ICAP	JS16	NI	EX090104	ZJP	07-JUL-1992	23-JUL-1992	52.400	54.400 UGG	103.8	1.0
METALS IN SOIL BY ICAP	JS16	NI	EX090104	ZJP	07-JUL-1992	23-JUL-1992	51.900	54.400 UGG	104.8	1.0

		avg							104.3	
		minimum							103.8	
		maximum							104.8	
METALS IN SOIL BY ICAP	JS16	ZN	EX090104	ZJP	07-JUL-1992	23-JUL-1992	104.000	52.500 UGG	50.5	12.4
METALS IN SOIL BY ICAP	JS16	ZN	EX090104	ZJP	07-JUL-1992	23-JUL-1992	105.000	46.800 UGG	44.6	12.4

		avg							47.5	
		minimum							44.6	
		maximum							50.5	
BNA'S IN SOIL BY GC/MS	LM18	246TBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.700	0.380 UGG	5.7	.0
BNA'S IN SOIL BY GC/MS	LM18	246TBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.700	0.380 UGG	5.7	.0

		avg							5.7	
		minimum							5.7	
		maximum							5.7	
BNA'S IN SOIL BY GC/MS	LM18	2FBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.300	3.210 UGG	97.3	7.1
BNA'S IN SOIL BY GC/MS	LM18	2FBP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.300	2.990 UGG	90.6	7.1

		avg							93.9	
		minimum							90.6	
		maximum							97.3	
BNA'S IN SOIL BY GC/MS	LM18	2FP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.700	4.700 UGG	70.1	5.7
BNA'S IN SOIL BY GC/MS	LM18	2FP	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.700	4.440 UGG	66.3	5.7

		avg							68.2	
		minimum							66.3	
		maximum							70.1	
BNA'S IN SOIL BY GC/MS	LM18	NBD5	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.300	1.750 UGG	53.0	31.0
BNA'S IN SOIL BY GC/MS	LM18	NBD5	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.300	1.280 UGG	38.8	31.0

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD

		avg							45.9	
		minimum							38.8	
		maximum							53.0	
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.700	3.880 UGG	57.9	78.1
BNA'S IN SOIL BY GC/MS	LM18	PHEND6	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	6.700	1.700 UGG	25.4	78.1

		avg							41.6	
		minimum							25.4	
		maximum							57.9	
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.300	2.990 UGG	90.6	3.1
BNA'S IN SOIL BY GC/MS	LM18	TRPD14	21S-92-0	ZNU	09-JUL-1992	30-JUL-1992	3.300	2.900 UGG	87.9	3.1

		avg							89.2	
		minimum							87.9	
		maximum							90.6	
HG IN WATER BY CVA	S801	HG	MXMJ07X1	YVW	22-JUL-1992	05-AUG-1992	5.000	4.890 UGL	97.8	.0
HG IN WATER BY CVA	S801	HG	MXMJ07X1	YVW	22-JUL-1992	05-AUG-1992	5.000	4.890 UGL	97.8	.0
HG IN WATER BY CVA	S801	HG	MXMJ08X1	YVS	14-JUL-1992	23-JUL-1992	5.000	4.930 UGL	98.6	1.2
HG IN WATER BY CVA	S801	HG	MXMJ08X1	YVS	14-JUL-1992	23-JUL-1992	5.000	4.870 UGL	97.4	1.2
HG IN WATER BY CVA	S801	HG	MXMJ14X1	YVW	20-JUL-1992	05-AUG-1992	5.000	4.930 UGL	98.6	.0
HG IN WATER BY CVA	S801	HG	MXMJ14X1	YVW	20-JUL-1992	05-AUG-1992	5.000	4.930 UGL	98.6	.0
HG IN WATER BY CVA	S801	HG	MXG501XX	YVM	17-JUN-1992	07-JUL-1992	5.000	5.030 UGL	100.6	.6
HG IN WATER BY CVA	S801	HG	MXG501XX	YVM	17-JUN-1992	07-JUL-1992	5.000	5.000 UGL	100.0	.6

		avg							98.7	
		minimum							97.4	
		maximum							100.6	
TL IN WATER BY GFAA	SD09	TL	MDMJ13X1	ZKH	20-JUL-1992	11-AUG-1992	10.000	14.500 UGL	145.0	4.2
TL IN WATER BY GFAA	SD09	TL	MDMJ13X1	ZKH	20-JUL-1992	11-AUG-1992	10.000	13.900 UGL	139.0	4.2
TL IN WATER BY GFAA	SD09	TL	MXMJ1AX1	ZKH	21-JUL-1992	11-AUG-1992	10.000	15.800 UGL	158.0	.6
TL IN WATER BY GFAA	SD09	TL	MXMJ1AX1	ZKH	21-JUL-1992	11-AUG-1992	10.000	15.700 UGL	157.0	.6
TL IN WATER BY GFAA	SD09	TL	SBK92110	ZKE	09-JUL-1992	06-AUG-1992	10.000	14.700 UGL	147.0	13.0
TL IN WATER BY GFAA	SD09	TL	SBK92110	ZKE	09-JUL-1992	06-AUG-1992	10.000	12.900 UGL	129.0	13.0
TL IN WATER BY GFAA	SD09	TL	MXG509XX	ZKC	24-JUN-1992	23-JUL-1992	10.000	10.100 UGL	101.0	3.8
TL IN WATER BY GFAA	SD09	TL	MXG509XX	ZKC	24-JUN-1992	23-JUL-1992	10.000	9.720 UGL	97.2	3.8

		avg							134.2	

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

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TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

USATHAMA		IRDMIS		Percent Recovery					
Method	Test Name	Sample Number	Lot	Sample Date	Analysis Date	Value	Units	RPD	
Code	Description								
S028	SB IN WATER BY GFAA	MXM407X1	YWF	22- JUL - 1992	11- AUG - 1992	80.000	78.500 UGL	98.1	
	SB IN WATER BY GFAA	MXM407X1	YWF	22- JUL - 1992	11- AUG - 1992	80.000	76.800 UGL	96.0	
	SB IN WATER BY GFAA	MXM408X1	YWE	14- JUL - 1992	10- AUG - 1992	80.000	83.200 UGL	104.0	
	SB IN WATER BY GFAA	MXM408X1	YWE	14- JUL - 1992	10- AUG - 1992	80.000	78.400 UGL	98.0	
	SB IN WATER BY GFAA	MXM414X1	YWF	20- JUL - 1992	11- AUG - 1992	80.000	77.100 UGL	96.4	
	SB IN WATER BY GFAA	MXM414X1	YWF	20- JUL - 1992	11- AUG - 1992	80.000	74.600 UGL	93.3	
	SB IN WATER BY GFAA	WKG508XX	YWB	22- JUN - 1992	24- JUL - 1992	80.000	71.300 UGL	89.1	
	SB IN WATER BY GFAA	WKG508XX	YWB	22- JUN - 1992	24- JUL - 1992	80.000	68.800 UGL	86.0	
	SB IN WATER BY GFAA	WKG509XX	YWC	24- JUN - 1992	27- JUL - 1992	80.000	70.300 UGL	87.9	
	SB IN WATER BY GFAA	WKG509XX	YWC	24- JUN - 1992	27- JUL - 1992	80.000	69.400 UGL	86.8	

	avg							93.6	
	minimum							86.0	
	maximum							104.0	
SS10	METALS IN WATER BY ICAP	MDM413X1	ZZC	20- JUL - 1992	30- JUL - 1992	50.000	50.700 UGL	101.4	
	METALS IN WATER BY ICAP	MDM413X1	ZZC	20- JUL - 1992	30- JUL - 1992	50.000	48.000 UGL	96.0	
	METALS IN WATER BY ICAP	MDM407X1	ZZC	22- JUL - 1992	30- JUL - 1992	50.000	46.700 UGL	93.4	
	METALS IN WATER BY ICAP	MDM407X1	ZZC	22- JUL - 1992	30- JUL - 1992	50.000	45.600 UGL	91.2	
	METALS IN WATER BY ICAP	SBK92111	YOZ	14- JUL - 1992	21- JUL - 1992	50.000	49.800 UGL	99.6	
	METALS IN WATER BY ICAP	SBK92111	YOZ	14- JUL - 1992	21- JUL - 1992	50.000	45.100 UGL	90.2	
	METALS IN WATER BY ICAP	WX0901XX	YOU	16- JUN - 1992	30- JUN - 1992	50.000	48.600 UGL	97.2	
	METALS IN WATER BY ICAP	WX0901XX	YOU	16- JUN - 1992	30- JUN - 1992	50.000	45.900 UGL	91.8	

		avg							95.1
	minimum							90.2	
	maximum							101.4	
SS10	METALS IN WATER BY ICAP	MDM413X1	ZZC	20- JUL - 1992	30- JUL - 1992	2000.000	934.000 UGL	46.7	
	METALS IN WATER BY ICAP	MDM413X1	ZZC	20- JUL - 1992	30- JUL - 1992	2000.000	141.000 UGL	7.1	
	METALS IN WATER BY ICAP	MDM407X1	ZZC	22- JUL - 1992	30- JUL - 1992	2000.000	141.000 UGL	7.1	
	METALS IN WATER BY ICAP	MDM407X1	ZZC	22- JUL - 1992	30- JUL - 1992	2000.000	141.000 UGL	7.1	
	METALS IN WATER BY ICAP	SBK92111	YOZ	14- JUL - 1992	21- JUL - 1992	2000.000	2020.000 UGL	101.0	
	METALS IN WATER BY ICAP	SBK92111	YOZ	14- JUL - 1992	21- JUL - 1992	2000.000	1940.000 UGL	4.0	
	METALS IN WATER BY ICAP	WX0901XX	YOU	16- JUN - 1992	30- JUN - 1992	2000.000	2030.000 UGL	97.0	
	METALS IN WATER BY ICAP	WX0901XX	YOU	16- JUN - 1992	30- JUN - 1992	2000.000	2030.000 UGL	101.5	
	METALS IN WATER BY ICAP	WX0901XX	YOU	16- JUN - 1992	30- JUN - 1992	2000.000	1920.000 UGL	96.0	

	avg							57.9	
	minimum							7.1	
	maximum							101.5	

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	BA	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	2000.000	1820.000	UGL	91.0	2.2
METALS IN WATER BY ICAP	SS10	BA	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	2000.000	1780.000	UGL	89.0	2.2
METALS IN WATER BY ICAP	SS10	BA	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	2000.000	1750.000	UGL	87.5	1.7
METALS IN WATER BY ICAP	SS10	BA	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	2000.000	1720.000	UGL	86.0	1.7
METALS IN WATER BY ICAP	SS10	BA	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	2000.000	1840.000	UGL	92.0	2.8
METALS IN WATER BY ICAP	SS10	BA	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	2000.000	1790.000	UGL	89.5	2.8
METALS IN WATER BY ICAP	SS10	BA	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	2000.000	1810.000	UGL	90.5	2.8
METALS IN WATER BY ICAP	SS10	BA	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	2000.000	1760.000	UGL	88.0	2.8

		avg								89.2	
		minimum								86.0	
		maximum								92.0	
METALS IN WATER BY ICAP	SS10	BE	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	50.000	54.300	UGL	108.6	5.1
METALS IN WATER BY ICAP	SS10	BE	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	50.000	51.600	UGL	103.2	5.1
METALS IN WATER BY ICAP	SS10	BE	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	50.000	54.400	UGL	108.8	.0
METALS IN WATER BY ICAP	SS10	BE	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	50.000	54.400	UGL	108.8	.0
METALS IN WATER BY ICAP	SS10	BE	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	50.000	54.300	UGL	108.6	2.2
METALS IN WATER BY ICAP	SS10	BE	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	50.000	53.100	UGL	106.2	2.2
METALS IN WATER BY ICAP	SS10	BE	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	50.000	55.200	UGL	110.4	12.3
METALS IN WATER BY ICAP	SS10	BE	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	50.000	48.800	UGL	97.6	12.3

		avg								106.5	
		minimum								97.6	
		maximum								110.4	
METALS IN WATER BY ICAP	SS10	CA	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	10500.000	UGL	105.0	3.9
METALS IN WATER BY ICAP	SS10	CA	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	10100.000	UGL	101.0	3.9
METALS IN WATER BY ICAP	SS10	CA	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	10700.000	UGL	107.0	14.6
METALS IN WATER BY ICAP	SS10	CA	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	9240.000	UGL	92.4	14.6
METALS IN WATER BY ICAP	SS10	CA	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	10000.000	10900.000	UGL	109.0	6.6
METALS IN WATER BY ICAP	SS10	CA	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	10000.000	10200.000	UGL	102.0	6.6
METALS IN WATER BY ICAP	SS10	CA	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	10000.000	11200.000	UGL	112.0	8.4
METALS IN WATER BY ICAP	SS10	CA	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	10000.000	10300.000	UGL	103.0	8.4

		avg								103.9	
		minimum								92.4	
		maximum								112.0	
METALS IN WATER BY ICAP	SS10	CD	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	50.000	48.700	UGL	97.4	5.9
METALS IN WATER BY ICAP	SS10	CD	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	50.000	45.900	UGL	91.8	5.9
METALS IN WATER BY ICAP	SS10	CD	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	50.000	47.600	UGL	95.2	5.6
METALS IN WATER BY ICAP	SS10	CD	MXMW07X1	ZZC	22-JUL-1992	30-JUL-1992	50.000	45.000	UGL	90.0	5.6
METALS IN WATER BY ICAP	SS10	CD	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	50.000	51.000	UGL	102.0	7.5

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	CD	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	50.000	47.300 UGL	94.6	7.5
METALS IN WATER BY ICAP	SS10	CD	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	50.000	48.900 UGL	97.8	6.5
METALS IN WATER BY ICAP	SS10	*****	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	50.000	45.800 UGL	91.6	6.5
		avg							95.1	
		minimum							90.0	
		maximum							102.0	
METALS IN WATER BY ICAP	SS10	CO	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	563.000 UGL	112.6	4.9
METALS IN WATER BY ICAP	SS10	CO	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	536.000 UGL	107.2	4.9
METALS IN WATER BY ICAP	SS10	CO	MXM407X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	527.000 UGL	105.4	2.3
METALS IN WATER BY ICAP	SS10	CO	MXM407X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	515.000 UGL	103.0	2.3
METALS IN WATER BY ICAP	SS10	CO	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	500.000	573.000 UGL	114.6	5.9
METALS IN WATER BY ICAP	SS10	CO	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	500.000	540.000 UGL	108.0	5.9
METALS IN WATER BY ICAP	SS10	CO	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	500.000	547.000 UGL	109.4	3.3
METALS IN WATER BY ICAP	SS10	CO	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	500.000	529.000 UGL	105.8	3.3
		avg							108.3	
		minimum							103.0	
		maximum							114.6	
METALS IN WATER BY ICAP	SS10	CR	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	200.000	189.000 UGL	94.5	2.1
METALS IN WATER BY ICAP	SS10	CR	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	200.000	185.000 UGL	92.5	2.1
METALS IN WATER BY ICAP	SS10	CR	MXM407X1	ZZC	22-JUL-1992	30-JUL-1992	200.000	131.000 UGL	65.5	9.6
METALS IN WATER BY ICAP	SS10	CR	MXM407X1	ZZC	22-JUL-1992	30-JUL-1992	200.000	119.000 UGL	59.5	9.6
METALS IN WATER BY ICAP	SS10	CR	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	200.000	194.000 UGL	97.0	4.7
METALS IN WATER BY ICAP	SS10	CR	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	200.000	185.000 UGL	92.5	4.7
METALS IN WATER BY ICAP	SS10	CR	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	200.000	195.000 UGL	97.5	3.7
METALS IN WATER BY ICAP	SS10	CR	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	200.000	188.000 UGL	94.0	3.7
		avg							86.6	
		minimum							59.5	
		maximum							97.5	
METALS IN WATER BY ICAP	SS10	CJ	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	250.000	247.000 UGL	98.8	2.5
METALS IN WATER BY ICAP	SS10	CJ	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	250.000	241.000 UGL	96.4	2.5
METALS IN WATER BY ICAP	SS10	CJ	MXM407X1	ZZC	22-JUL-1992	30-JUL-1992	250.000	241.000 UGL	96.4	2.1
METALS IN WATER BY ICAP	SS10	CJ	MXM407X1	ZZC	22-JUL-1992	30-JUL-1992	250.000	236.000 UGL	94.4	2.1
METALS IN WATER BY ICAP	SS10	CJ	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	250.000	250.000 UGL	100.0	6.6
METALS IN WATER BY ICAP	SS10	CJ	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	250.000	234.000 UGL	93.6	6.6
METALS IN WATER BY ICAP	SS10	CJ	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	250.000	247.000 UGL	98.8	3.7
METALS IN WATER BY ICAP	SS10	CJ	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	250.000	238.000 UGL	95.2	3.7
		avg							96.7	

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		minimum maximum								
METALS IN WATER BY ICAP	SS10	FE	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	1000.000	38.800 UGL	93.6	.0
METALS IN WATER BY ICAP	SS10	FE	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	1000.000	38.800 UGL	100.0	.0
METALS IN WATER BY ICAP	SS10	FE	MDMW07X1	ZZC	22-JUL-1992	30-JUL-1992	1000.000	38.800 UGL	3.9	.0
METALS IN WATER BY ICAP	SS10	FE	MDMW07X1	ZZC	22-JUL-1992	30-JUL-1992	1000.000	38.800 UGL	3.9	.0
METALS IN WATER BY ICAP	SS10	FE	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	1000.000	1060.000 UGL	106.0	3.8
METALS IN WATER BY ICAP	SS10	FE	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	1000.000	1020.000 UGL	102.0	3.8
METALS IN WATER BY ICAP	SS10	FE	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	1000.000	1330.000 UGL	133.0	20.7
METALS IN WATER BY ICAP	SS10	FE	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	1000.000	1080.000 UGL	108.0	20.7

		avg							58.1	
		minimum							3.9	
		maximum							133.0	
METALS IN WATER BY ICAP	SS10	K	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	10900.000 UGL	109.0	3.7
METALS IN WATER BY ICAP	SS10	K	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	10500.000 UGL	105.0	3.7
METALS IN WATER BY ICAP	SS10	K	MDMW07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	10000.000 UGL	100.0	.8
METALS IN WATER BY ICAP	SS10	K	MDMW07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	9920.000 UGL	99.2	.8
METALS IN WATER BY ICAP	SS10	K	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	10000.000	11500.000 UGL	115.0	8.1
METALS IN WATER BY ICAP	SS10	K	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	10000.000	10600.000 UGL	106.0	8.1
METALS IN WATER BY ICAP	SS10	K	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	10000.000	11500.000 UGL	115.0	9.1
METALS IN WATER BY ICAP	SS10	K	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	10000.000	10500.000 UGL	105.0	9.1

		avg							106.8	
		minimum							99.2	
		maximum							115.0	
METALS IN WATER BY ICAP	SS10	MG	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	9480.000 UGL	94.8	.6
METALS IN WATER BY ICAP	SS10	MG	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	9420.000 UGL	94.2	.6
METALS IN WATER BY ICAP	SS10	MG	MDMW07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	5270.000 UGL	52.7	1.5
METALS IN WATER BY ICAP	SS10	MG	MDMW07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	5190.000 UGL	51.9	1.5
METALS IN WATER BY ICAP	SS10	MG	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	10000.000	10100.000 UGL	101.0	3.6
METALS IN WATER BY ICAP	SS10	MG	SBK92111	Y0Z	14-JUL-1992	21-JUL-1992	10000.000	9740.000 UGL	97.4	3.6
METALS IN WATER BY ICAP	SS10	MG	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	10000.000	10400.000 UGL	104.0	6.8
METALS IN WATER BY ICAP	SS10	MG	WX0901XX	Y0U	16-JUN-1992	30-JUN-1992	10000.000	9720.000 UGL	97.2	6.8

		avg							86.7	
		minimum							51.9	
		maximum							104.0	
METALS IN WATER BY ICAP	SS10	MN	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	494.000 UGL	98.8	2.0
METALS IN WATER BY ICAP	SS10	MN	MDMW13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	484.000 UGL	96.8	2.0

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	MN	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	478.000 UGL	95.6	8.3
METALS IN WATER BY ICAP	SS10	MN	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	440.000 UGL	88.0	8.3
METALS IN WATER BY ICAP	SS10	MN	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	500.000	509.000 UGL	101.8	3.6
METALS IN WATER BY ICAP	SS10	MN	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	500.000	491.000 UGL	98.2	3.6
METALS IN WATER BY ICAP	SS10	MN	WX0901XX	YOU	16-JUN-1992	30-JUN-1992	500.000	507.000 UGL	101.4	3.8
METALS IN WATER BY ICAP	SS10	MN	WX0901XX	YOU	16-JUN-1992	30-JUN-1992	500.000	488.000 UGL	97.6	3.8

		avg							97.3	
		minimum							88.0	
		maximum							101.8	
METALS IN WATER BY ICAP	SS10	NA	MDMH13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	10700.000 UGL	107.0	2.8
METALS IN WATER BY ICAP	SS10	NA	MDMH13X1	ZZC	20-JUL-1992	30-JUL-1992	10000.000	10400.000 UGL	104.0	2.8
METALS IN WATER BY ICAP	SS10	NA	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	10300.000 UGL	103.0	2.0
METALS IN WATER BY ICAP	SS10	NA	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	10000.000	10100.000 UGL	101.0	2.0
METALS IN WATER BY ICAP	SS10	NA	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	10000.000	10500.000 UGL	105.0	2.9
METALS IN WATER BY ICAP	SS10	NA	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	10000.000	10200.000 UGL	102.0	2.9
METALS IN WATER BY ICAP	SS10	NA	WX0901XX	YOU	16-JUN-1992	30-JUN-1992	10000.000	10600.000 UGL	106.0	4.8
METALS IN WATER BY ICAP	SS10	NA	WX0901XX	YOU	16-JUN-1992	30-JUN-1992	10000.000	10100.000 UGL	101.0	4.8

		avg							103.6	
		minimum							101.0	
		maximum							107.0	
METALS IN WATER BY ICAP	SS10	NI	MDMH13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	569.000 UGL	113.8	5.2
METALS IN WATER BY ICAP	SS10	NI	MDMH13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	540.000 UGL	108.0	5.2
METALS IN WATER BY ICAP	SS10	NI	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	521.000 UGL	104.2	1.0
METALS IN WATER BY ICAP	SS10	NI	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	516.000 UGL	103.2	1.0
METALS IN WATER BY ICAP	SS10	NI	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	500.000	569.000 UGL	113.8	3.4
METALS IN WATER BY ICAP	SS10	NI	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	500.000	550.000 UGL	110.0	3.4
METALS IN WATER BY ICAP	SS10	NI	WX0901XX	YOU	16-JUN-1992	30-JUN-1992	500.000	557.000 UGL	111.4	3.5
METALS IN WATER BY ICAP	SS10	NI	WX0901XX	YOU	16-JUN-1992	30-JUN-1992	500.000	538.000 UGL	107.6	3.5

		avg							109.0	
		minimum							103.2	
		maximum							113.8	
METALS IN WATER BY ICAP	SS10	V	MDMH13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	523.000 UGL	104.6	4.1
METALS IN WATER BY ICAP	SS10	V	MDMH13X1	ZZC	20-JUL-1992	30-JUL-1992	500.000	502.000 UGL	100.4	4.1
METALS IN WATER BY ICAP	SS10	V	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	486.000 UGL	97.2	.8
METALS IN WATER BY ICAP	SS10	V	MXMH07X1	ZZC	22-JUL-1992	30-JUL-1992	500.000	482.000 UGL	96.4	.8
METALS IN WATER BY ICAP	SS10	V	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	500.000	524.000 UGL	104.8	3.7
METALS IN WATER BY ICAP	SS10	V	SBK92111	YOZ	14-JUL-1992	21-JUL-1992	500.000	505.000 UGL	101.0	3.7
METALS IN WATER BY ICAP	SS10	V	WX0901XX	YOU	16-JUN-1992	30-JUN-1992	500.000	515.000 UGL	103.0	2.8

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		minimum							90.5	
		maximum							100.0	
TOT. PO4 IN WATER	TF27	PO4	MXMH02X1	ZCE	22-JUL-1992	11-AUG-1992	385.000	396.000 UGL	102.9	.0
TOT. PO4 IN WATER	TF27	PO4	MXMH02X1	ZCE	22-JUL-1992	11-AUG-1992	385.000	396.000 UGL	102.9	.0
TOT. PO4 IN WATER	TF27	PO4	MXMH08X1	ZCD	14-JUL-1992	22-JUL-1992	385.000	400.000 UGL	103.9	.0
TOT. PO4 IN WATER	TF27	PO4	MXMH08X1	ZCD	14-JUL-1992	22-JUL-1992	385.000	400.000 UGL	103.9	.0
TOT. PO4 IN WATER	TF27	PO4	MXG501XX	ZCB	17-JUN-1992	24-JUN-1992	385.000	386.000 UGL	100.3	2.6
TOT. PO4 IN WATER	TF27	PO4	MXG501XX	ZCB	17-JUN-1992	24-JUN-1992	385.000	376.000 UGL	97.7	2.6

		avg							101.9	
		minimum							97.7	
		maximum							103.9	
SO4 IN WATER	TT10	CL	MDMH13X1	AKA	20-JUL-1992	04-AUG-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MDMH13X1	AKA	20-JUL-1992	04-AUG-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MXMH08X1	X1Y	14-JUL-1992	21-JUL-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MXMH08X1	X1Y	14-JUL-1992	21-JUL-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MXMH12X1	AKA	21-JUL-1992	04-AUG-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MXMH12X1	AKA	21-JUL-1992	04-AUG-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MXG507XX	X1W	18-JUN-1992	07-JUL-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MXG507XX	X1W	18-JUN-1992	07-JUL-1992	25000.000	29000.000 UGL	116.0	.0

		avg							116.0	
		minimum							116.0	
		maximum							116.0	
SO4 IN WATER	TT10	SO4	MDMH13X1	AKA	20-JUL-1992	04-AUG-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MDMH13X1	AKA	20-JUL-1992	04-AUG-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MXMH08X1	X1Y	14-JUL-1992	21-JUL-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MXMH08X1	X1Y	14-JUL-1992	21-JUL-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MXMH12X1	AKA	21-JUL-1992	04-AUG-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MXMH12X1	AKA	21-JUL-1992	04-AUG-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MXG507XX	X1W	18-JUN-1992	07-JUL-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MXG507XX	X1W	18-JUN-1992	07-JUL-1992	250000.000	260000.000 UGL	104.0	.0

		avg							104.0	
		minimum							104.0	
		maximum							104.0	
EXPLOSIVES IN WATER	U432	135TNB	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	9.580	7.940 UGL	82.9	4.9

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)

Group: 5

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
EXPLOSIVES IN WATER	U432	135TNB	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	9.580	7.560 UGL	78.9	4.9
EXPLOSIVES IN WATER	U432	135TNB	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	9.120	4.130 UGL	45.3	2.0
EXPLOSIVES IN WATER	U432	135TNB	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	9.120	4.050 UGL	44.4	2.0

		avg							62.9	
		minimum							44.4	
		maximum							82.9	
EXPLOSIVES IN WATER	U432	246TNT	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	12.100	12.200 UGL	100.8	5.0
EXPLOSIVES IN WATER	U432	246TNT	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	12.100	11.600 UGL	95.9	5.0
EXPLOSIVES IN WATER	U432	246TNT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	12.100	8.280 UGL	68.4	.0
EXPLOSIVES IN WATER	U432	246TNT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	12.100	8.280 UGL	68.4	.0

		avg							83.4	
		minimum							68.4	
		maximum							100.8	
EXPLOSIVES IN WATER	U432	240NT	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	1.230	1.230 UGL	100.0	3.3
EXPLOSIVES IN WATER	U432	240NT	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	1.230	1.190 UGL	96.7	3.3
EXPLOSIVES IN WATER	U432	240NT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	1.150	1.210 UGL	105.2	6.8
EXPLOSIVES IN WATER	U432	240NT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	1.150	1.130 UGL	98.3	6.8

		avg							100.1	
		minimum							96.7	
		maximum							105.2	
EXPLOSIVES IN WATER	U432	340NT	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	4.940	5.330 UGL	107.9	18.9
EXPLOSIVES IN WATER	U432	340NT	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	4.940	4.530 UGL	91.7	18.9
EXPLOSIVES IN WATER	U432	340NT	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	4.940	4.430 UGL	89.7	18.9
EXPLOSIVES IN WATER	U432	340NT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	4.940	4.800 UGL	97.2	31.0
EXPLOSIVES IN WATER	U432	340NT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	4.940	3.860 UGL	78.1	31.0
EXPLOSIVES IN WATER	U432	340NT	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	4.940	3.540 UGL	71.7	31.0

		avg							89.4	
		minimum							71.7	
		maximum							107.9	
EXPLOSIVES IN WATER	U432	NB	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	12.000	10.800 UGL	90.0	.9
EXPLOSIVES IN WATER	U432	NB	MXMH08X1	YXX	14-JUL-1992	26-JUL-1992	12.000	10.700 UGL	89.2	.9
EXPLOSIVES IN WATER	U432	NB	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	12.000	11.200 UGL	93.3	1.8
EXPLOSIVES IN WATER	U432	NB	WAG507XX	YXP	18-JUN-1992	01-JUL-1992	12.000	11.000 UGL	91.7	1.8

		avg							91.0	
		minimum							89.2	

TABLE F10
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 5
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		maximum							93.3	
EXPLOSIVES IN WATER	UN32	RDX	MXM08X1	YXX	14-JUL-1992	26-JUL-1992	24.400	22.200 UGL	91.0	3.7
EXPLOSIVES IN WATER	UN32	RDX	MXM08X1	YXX	14-JUL-1992	26-JUL-1992	24.400	21.400 UGL	87.7	3.7
EXPLOSIVES IN WATER	UN32	RDX	MXG507XX	YXP	18-JUN-1992	01-JUL-1992	24.400	22.000 UGL	90.2	3.7
EXPLOSIVES IN WATER	UN32	RDX	MXG507XX	YXP	18-JUN-1992	01-JUL-1992	24.400	21.200 UGL	86.9	3.7

		avg							88.9	
		minimum							86.9	
		maximum							91.0	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
	00	ALK	MXG601XX	AGZ	22-JUN-1992	30-JUN-1992	44600.000	45000.000 UGL	100.9	2.2
	00	ALK	MXG601XX	AGZ	22-JUN-1992	30-JUN-1992	44600.000	44000.000 UGL	98.7	2.2
	00	ALK	MXG604XX	AGZ	19-JUN-1992	30-JUN-1992	44600.000	45000.000 UGL	100.9	2.2
	00	ALK	MXG604XX	AGZ	19-JUN-1992	30-JUN-1992	44600.000	44000.000 UGL	98.7	2.2

		avg							99.8	
		minimum							98.7	
		maximum							100.9	
	00	TOC	BXG60655	ZWK	17-JUN-1992	06-JUL-1992	956.000	874.000 UGG	91.4	5.6
	00	TOC	BXG60655	ZWK	17-JUN-1992	06-JUL-1992	756.000	731.000 UGG	96.7	5.6
	00	TOC	BXG60855	ZWK	22-JUN-1992	06-JUL-1992	1620.000	2080.000 UGG	128.4	48.1
	00	TOC	BXG60855	ZWK	22-JUN-1992	06-JUL-1992	1400.000	1100.000 UGG	78.6	48.1
	00	TOC	SBK92103	ZWH	25-JUN-1992	09-JUL-1992	20000.000	17800.000 UGL	89.0	4.6
	00	TOC	SBK92103	ZWH	25-JUN-1992	09-JUL-1992	20000.000	17000.000 UGL	85.0	4.6

		avg							94.8	
		minimum							78.6	
		maximum							128.4	
	00	TPHC	BX300610	ALO	10-JUN-1992	18-JUN-1992	1190.000	1190.000 UGG	100.0	.0
	00	TPHC	BX300610	ALO	10-JUN-1992	18-JUN-1992	1190.000	1190.000 UGG	100.0	.0
	00	TPHC	BX310308	ZOU	11-JUN-1992	29-JUN-1992	1180.000	1170.000 UGG	99.2	2.6
	00	TPHC	BX310308	ZOU	11-JUN-1992	29-JUN-1992	1180.000	1140.000 UGG	96.6	2.6
	00	TPHC	BX500408	AGC	25-JUN-1992	22-JUL-1992	1160.000	1140.000 UGG	98.3	.9
	00	TPHC	BX500408	AGC	25-JUN-1992	22-JUL-1992	1160.000	1130.000 UGG	97.4	.9
	00	TPHC	BX500700	ZWS	24-JUN-1992	20-JUL-1992	1170.000	1190.000 UGG	101.7	.0
	00	TPHC	BX500700	ZWS	24-JUN-1992	20-JUL-1992	1160.000	1180.000 UGG	101.7	.0
	00	TPHC	BXG60200	ZWB	11-JUN-1992	19-JUN-1992	1170.000	1170.000 UGG	100.0	2.6
	00	TPHC	BXG60200	ZWB	11-JUN-1992	19-JUN-1992	1170.000	1140.000 UGG	97.4	2.6
	00	TPHC	DXG60400	ZOX	19-JUN-1992	09-JUL-1992	3400.000	4270.000 UGG	125.6	10.2
	00	TPHC	DXG60400	ZOX	19-JUN-1992	09-JUL-1992	3070.000	4270.000 UGG	139.1	10.2
	00	TPHC	MXG611X1	AYT	27-JUL-1992	12-AUG-1992	4400.000	3570.000 UGL	81.1	13.6
	00	TPHC	MXG611X1	AYT	27-JUL-1992	12-AUG-1992	4450.000	3150.000 UGL	70.8	13.6

		avg							100.6	
		minimum							70.8	
		maximum							139.1	
	99	ALK	MXG607X1	ALX	27-JUL-1992	04-AUG-1992	44.600	45000.000 UGL	100896.9	2.2
	99	ALK	MXG607X1	ALX	27-JUL-1992	04-AUG-1992	44.600	44000.000 UGL	98654.7	2.2
	99	ALK	MXG611X1	ASJ	27-JUL-1992	09-AUG-1992	44600.000	45000.000 UGL	100.9	2.2
	99	ALK	MXG611X1	ASJ	27-JUL-1992	09-AUG-1992	44600.000	44000.000 UGL	98.7	2.2

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD

avg										
minimum										
maximum										

49937.8										
98.7										
100896.9										

J801	J801	HG	BX300708	YHX	10-JUN-1992	03-JUL-1992	0.536	0.528 UGG	98.5	.8
J801	J801	HG	BX300708	YHX	10-JUN-1992	03-JUL-1992	0.536	0.524 UGG	97.8	.8
J801	J801	HG	BX310308	YHY	11-JUN-1992	03-JUL-1992	0.518	0.593 UGG	114.5	1.7
J801	J801	HG	BX310308	YHY	11-JUN-1992	03-JUL-1992	0.520	0.585 UGG	112.5	1.7
J801	J801	HG	BX310560	YHY	15-JUN-1992	03-JUL-1992	0.507	0.594 UGG	117.2	2.2
J801	J801	HG	BX310560	YHY	15-JUN-1992	03-JUL-1992	0.513	0.588 UGG	114.6	2.2
J801	J801	HG	BXG60200	YHX	11-JUN-1992	03-JUL-1992	0.512	0.528 UGG	103.1	4.4
J801	J801	HG	BXG60200	YHX	11-JUN-1992	03-JUL-1992	0.515	0.508 UGG	98.6	4.4

avg										
minimum										
maximum										

107.1										
97.8										
117.2										

SE IN SOIL BY GFAA	J015	SE	BX310308	YQS	11-JUN-1992	02-JUL-1992	4.150	5.220 UGG	125.8	4.6
SE IN SOIL BY GFAA	J015	SE	BX310308	YQS	11-JUN-1992	02-JUL-1992	4.120	4.950 UGG	120.1	4.6
SE IN SOIL BY GFAA	J015	SE	BX310560	YQS	15-JUN-1992	02-JUL-1992	4.110	5.250 UGG	127.7	2.5
SE IN SOIL BY GFAA	J015	SE	BX310560	YQR	15-JUN-1992	02-JUL-1992	4.100	5.110 UGG	124.6	2.5
SE IN SOIL BY GFAA	J015	SE	BXG60200	YQR	11-JUN-1992	30-JUN-1992	4.120	4.790 UGG	116.3	.8
SE IN SOIL BY GFAA	J015	SE	BXG60200	YQR	11-JUN-1992	30-JUN-1992	4.110	4.740 UGG	115.3	.8
SE IN SOIL BY GFAA	J015	SE	BXG60325	YQR	09-JUN-1992	30-JUN-1992	4.430	4.250 UGG	95.9	2.2
SE IN SOIL BY GFAA	J015	SE	BXG60325	YQR	09-JUN-1992	30-JUN-1992	4.410	4.140 UGG	93.9	2.2
SE IN SOIL BY GFAA	J015	SE	DXG60400	ZSA	19-JUN-1992	17-JUL-1992	6.210	3.080 UGG	49.6	8.0
SE IN SOIL BY GFAA	J015	SE	DXG60400	ZSA	19-JUN-1992	17-JUL-1992	6.250	2.860 UGG	45.8	8.0

avg										
minimum										
maximum										

101.5										
45.8										
127.7										

PB IN SOIL BY GFAA	J017	PB	BX310308	ZAL	11-JUN-1992	08-JUL-1992	4.150	4.670 UGG	112.5	.6
PB IN SOIL BY GFAA	J017	PB	BX310308	ZAL	11-JUN-1992	08-JUL-1992	4.120	4.610 UGG	111.9	.6
PB IN SOIL BY GFAA	J017	PB	BX310560	ZAL	15-JUN-1992	08-JUL-1992	4.100	4.290 UGG	104.6	19.1
PB IN SOIL BY GFAA	J017	PB	BX310560	ZAL	15-JUN-1992	08-JUL-1992	4.110	3.550 UGG	86.4	19.1
PB IN SOIL BY GFAA	J017	PB	BX500408	ZAU	25-JUN-1992	23-JUL-1992	4.080	3.200 UGG	78.4	6.7
PB IN SOIL BY GFAA	J017	PB	BX500408	ZAU	25-JUN-1992	23-JUL-1992	4.090	3.000 UGG	73.3	6.7
PB IN SOIL BY GFAA	J017	PB	BX500915	ZAV	23-JUN-1992	24-JUL-1992	4.720	5.900 UGG	125.0	7.4
PB IN SOIL BY GFAA	J017	PB	BX500915	ZAV	23-JUN-1992	24-JUL-1992	4.650	5.400 UGG	116.1	7.4

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
PB IN SOIL BY GFAA	JD17	PB	BXG60200	ZAK	11-JUN-1992	15-JUL-1992	4.050	6.700 UGG	165.4	7.2
PB IN SOIL BY GFAA	JD17	PB	BXG60200	ZAK	11-JUN-1992	15-JUL-1992	4.000	6.160 UGG	154.0	7.2
PB IN SOIL BY GFAA	JD17	PB	BXG60325	ZAK	09-JUN-1992	15-JUL-1992	4.420	5.890 UGG	133.3	19.9
PB IN SOIL BY GFAA	JD17	PB	BXG60325	ZAK	09-JUN-1992	15-JUL-1992	4.260	4.650 UGG	109.2	19.9
PB IN SOIL BY GFAA	JD17	PB	BXG60855	ZAU	22-JUN-1992	23-JUL-1992	4.840	4.580 UGG	94.6	.1
PB IN SOIL BY GFAA	JD17	PB	BXG60855	ZAU	22-JUN-1992	23-JUL-1992	4.750	4.500 UGG	94.7	.1
PB IN SOIL BY GFAA	JD17	PB	DXG60400	ZAT	19-JUN-1992	17-JUL-1992	6.210	5.700 UGG	91.8	38.1
PB IN SOIL BY GFAA	JD17	PB	DXG60400	ZAT	19-JUN-1992	17-JUL-1992	6.250	3.900 UGG	62.4	

		avg							107.1	
		minimum							62.4	
		maximum							165.4	
AS IN SOIL BY GFAA	JD19	AS	BX310308	ZIB	11-JUN-1992	01-JUL-1992	4.120	4.560 UGG	110.7	57.9
AS IN SOIL BY GFAA	JD19	AS	BX310308	ZIB	11-JUN-1992	01-JUL-1992	4.150	2.530 UGG	61.0	57.9
AS IN SOIL BY GFAA	JD19	AS	BX310560	ZIB	15-JUN-1992	01-JUL-1992	4.100	6.070 UGG	156.1	53.7
AS IN SOIL BY GFAA	JD19	AS	BX310560	ZIB	15-JUN-1992	01-JUL-1992	4.110	3.700 UGG	90.0	53.7
AS IN SOIL BY GFAA	JD19	AS	BXG60200	ZIA	11-JUN-1992	29-JUN-1992	4.120	8.600 UGG	208.7	12.1
AS IN SOIL BY GFAA	JD19	AS	BXG60200	ZIA	11-JUN-1992	29-JUN-1992	4.110	7.600 UGG	184.9	12.1
AS IN SOIL BY GFAA	JD19	AS	BXG60325	ZIA	09-JUN-1992	29-JUN-1992	4.430	4.100 UGG	92.6	10.1
AS IN SOIL BY GFAA	JD19	AS	BXG60325	ZIA	09-JUN-1992	29-JUN-1992	4.410	3.690 UGG	83.7	10.1
AS IN SOIL BY GFAA	JD19	AS	DXG60400	ZIK	19-JUN-1992	28-JUL-1992	6.210	5.670 UGG	91.3	15.6
AS IN SOIL BY GFAA	JD19	AS	DXG60400	ZIK	19-JUN-1992	28-JUL-1992	6.250	4.880 UGG	78.1	15.6

		avg							115.7	
		minimum							61.0	
		maximum							208.7	
TL IN SOIL BY GFAA	JD24	TL	DXG60400	ZLC	19-JUN-1992	20-JUL-1992	6.210	6.520 UGG	105.0	1.6
TL IN SOIL BY GFAA	JD24	TL	DXG60400	ZLC	19-JUN-1992	20-JUL-1992	6.250	6.460 UGG	103.4	1.6

		avg							104.2	
		minimum							103.4	
		maximum							105.0	
SB IN SOIL BY GFAA	JD25	SB	BX300510	ZMA	10-JUN-1992	09-JUL-1992	8.490	6.140 UGG	72.3	.9
SB IN SOIL BY GFAA	JD25	SB	BX300510	ZMA	10-JUN-1992	09-JUL-1992	8.470	6.070 UGG	71.7	.9
SB IN SOIL BY GFAA	JD25	SB	BXG60200	ZMA	11-JUN-1992	09-JUL-1992	8.210	6.160 UGG	75.0	1.9
SB IN SOIL BY GFAA	JD25	SB	BXG60200	ZMA	11-JUN-1992	09-JUL-1992	8.220	6.050 UGG	73.6	1.9
SB IN SOIL BY GFAA	JD25	SB	DXG60400	ZMC	19-JUN-1992	24-JUL-1992	12.300	9.670 UGG	78.6	9.2
SB IN SOIL BY GFAA	JD25	SB	DXG60400	ZMC	19-JUN-1992	24-JUL-1992	12.100	8.680 UGG	71.7	9.2

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD

avg										
minimum										
maximum										
METALS IN SOIL BY ICAP	JS16	AG	BX300604	YGY	10-JUN-1992	25-JUN-1992	8.420	8.080 UGG	96.0	.1
METALS IN SOIL BY ICAP	JS16	AG	BX300604	YGY	10-JUN-1992	25-JUN-1992	8.400	8.070 UGG	96.1	.1
METALS IN SOIL BY ICAP	JS16	AG	BX310304	YGY	11-JUN-1992	27-JUN-1992	7.900	7.120 UGG	90.1	1.8
METALS IN SOIL BY ICAP	JS16	AG	BX310304	YGY	11-JUN-1992	27-JUN-1992	7.910	7.000 UGG	88.5	1.8
METALS IN SOIL BY ICAP	JS16	AG	BX310560	YGY	15-JUN-1992	27-JUN-1992	8.290	7.710 UGG	93.0	.5
METALS IN SOIL BY ICAP	JS16	AG	BX310560	YGY	15-JUN-1992	27-JUN-1992	7.990	7.470 UGG	93.5	.5
METALS IN SOIL BY ICAP	JS16	AG	BXG60200	YGY	11-JUN-1992	25-JUN-1992	8.200	8.000 UGG	97.6	2.6
METALS IN SOIL BY ICAP	JS16	AG	BXG60200	YGY	11-JUN-1992	25-JUN-1992	8.160	7.760 UGG	95.1	2.6
METALS IN SOIL BY ICAP	JS16	AG	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	12.500	12.000 UGG	96.0	4.3
METALS IN SOIL BY ICAP	JS16	AG	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	12.500	11.500 UGG	92.0	4.3

avg										
minimum										
maximum										
METALS IN SOIL BY ICAP	JS16	BE	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.600	55.200 UGG	104.9	.5
METALS IN SOIL BY ICAP	JS16	BE	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.500	54.800 UGG	104.4	.5
METALS IN SOIL BY ICAP	JS16	BE	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	51.000 UGG	103.2	1.8
METALS IN SOIL BY ICAP	JS16	BE	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	50.100 UGG	101.4	1.8
METALS IN SOIL BY ICAP	JS16	BE	BX310560	YGY	15-JUN-1992	27-JUN-1992	51.800	54.000 UGG	104.2	.1
METALS IN SOIL BY ICAP	JS16	BE	BX310560	YGY	15-JUN-1992	27-JUN-1992	50.000	52.200 UGG	104.4	.1
METALS IN SOIL BY ICAP	JS16	BE	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.200	53.800 UGG	105.1	1.3
METALS IN SOIL BY ICAP	JS16	BE	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.000	52.900 UGG	103.7	1.3
METALS IN SOIL BY ICAP	JS16	BE	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	81.400 UGG	104.5	.9
METALS IN SOIL BY ICAP	JS16	BE	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	80.700 UGG	103.6	.9

avg										
minimum										
maximum										
METALS IN SOIL BY ICAP	JS16	CD	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.600	55.500 UGG	105.5	.2
METALS IN SOIL BY ICAP	JS16	CD	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.500	55.500 UGG	105.7	.2
METALS IN SOIL BY ICAP	JS16	CD	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	51.300 UGG	103.8	2.8
METALS IN SOIL BY ICAP	JS16	CD	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	49.900 UGG	101.0	2.8
METALS IN SOIL BY ICAP	JS16	CD	BX310560	YGY	15-JUN-1992	27-JUN-1992	51.800	53.400 UGG	103.1	.9
METALS IN SOIL BY ICAP	JS16	CD	BX310560	YGY	15-JUN-1992	27-JUN-1992	50.000	52.000 UGG	104.0	.9
METALS IN SOIL BY ICAP	JS16	CD	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.200	53.700 UGG	104.9	1.7
METALS IN SOIL BY ICAP	JS16	CD	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.000	52.600 UGG	103.1	1.7

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	CD	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	96.200 UGG	123.5	11.5
METALS IN SOIL BY ICAP	JS16	CD	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	85.700 UGG	110.0	11.5

		avg							106.5	
		minimum							101.0	
		maximum							123.5	
METALS IN SOIL BY ICAP	JS16	CR	BX300604	YGY	10-JUN-1992	25-JUN-1992	105.000	116.000 UGG	110.5	.9
METALS IN SOIL BY ICAP	JS16	CR	BX300604	YGY	10-JUN-1992	25-JUN-1992	105.000	115.000 UGG	109.5	.9
METALS IN SOIL BY ICAP	JS16	CR	BX310304	YGY	11-JUN-1992	27-JUN-1992	98.800	108.000 UGG	109.3	3.9
METALS IN SOIL BY ICAP	JS16	CR	BX310304	YGY	11-JUN-1992	27-JUN-1992	98.900	104.000 UGG	105.2	3.9
METALS IN SOIL BY ICAP	JS16	CR	BX310560	YGY	15-JUN-1992	27-JUN-1992	104.000	113.000 UGG	108.7	.4
METALS IN SOIL BY ICAP	JS16	CR	BX310560	YGY	15-JUN-1992	27-JUN-1992	99.900	109.000 UGG	109.1	.4
METALS IN SOIL BY ICAP	JS16	CR	BXG60200	YGY	11-JUN-1992	25-JUN-1992	102.000	116.000 UGG	113.7	3.5
METALS IN SOIL BY ICAP	JS16	CR	BXG60200	YGY	11-JUN-1992	25-JUN-1992	102.000	112.000 UGG	109.8	3.5
METALS IN SOIL BY ICAP	JS16	CR	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	156.000	168.000 UGG	107.7	3.6
METALS IN SOIL BY ICAP	JS16	CR	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	156.000	162.000 UGG	103.8	3.6

		avg							108.7	
		minimum							103.8	
		maximum							113.7	
METALS IN SOIL BY ICAP	JS16	CJ	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.600	54.100 UGG	102.9	.9
METALS IN SOIL BY ICAP	JS16	CJ	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.500	53.500 UGG	101.9	.9
METALS IN SOIL BY ICAP	JS16	CJ	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	48.600 UGG	98.4	3.1
METALS IN SOIL BY ICAP	JS16	CJ	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	47.100 UGG	95.3	3.1
METALS IN SOIL BY ICAP	JS16	CJ	BX310560	YGY	15-JUN-1992	27-JUN-1992	51.800	52.500 UGG	101.4	1.0
METALS IN SOIL BY ICAP	JS16	CJ	BX310560	YGY	15-JUN-1992	27-JUN-1992	50.000	51.200 UGG	102.4	1.0
METALS IN SOIL BY ICAP	JS16	CJ	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.000	52.900 UGG	103.7	.8
METALS IN SOIL BY ICAP	JS16	CJ	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.200	52.700 UGG	102.9	.8
METALS IN SOIL BY ICAP	JS16	CJ	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	92.600 UGG	118.9	15.2
METALS IN SOIL BY ICAP	JS16	CJ	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	79.500 UGG	102.1	15.2

		avg							103.0	
		minimum							95.3	
		maximum							118.9	
METALS IN SOIL BY ICAP	JS16	NI	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.600	58.800 UGG	111.8	4.5
METALS IN SOIL BY ICAP	JS16	NI	BX300604	YGY	10-JUN-1992	25-JUN-1992	52.500	56.100 UGG	106.9	4.5
METALS IN SOIL BY ICAP	JS16	NI	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	53.000 UGG	107.3	2.9
METALS IN SOIL BY ICAP	JS16	NI	BX310304	YGY	11-JUN-1992	27-JUN-1992	49.400	51.500 UGG	104.3	2.9
METALS IN SOIL BY ICAP	JS16	NI	BX310560	YGY	15-JUN-1992	27-JUN-1992	51.800	55.100 UGG	106.4	1.9
METALS IN SOIL BY ICAP	JS16	NI	BX310560	YGY	15-JUN-1992	27-JUN-1992	50.000	54.200 UGG	108.4	1.9
METALS IN SOIL BY ICAP	JS16	NI	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.000	57.100 UGG	112.0	4.9

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	NI	BXG60200	YGY	11-JUN-1992	25-JUN-1992	51.200	54.600 UGG	106.6	4.9
METALS IN SOIL BY ICAP	JS16	NI	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	85.300 UGG	109.5	3.1
METALS IN SOIL BY ICAP	JS16	NI	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	77.900	82.700 UGG	106.2	3.1

		avg							107.9	
		minimum							104.3	
		maximum							112.0	
METALS IN SOIL BY ICAP	JS16	ZN	BX300604	YGY	10-JUN-1992	25-JUN-1992	105.000	118.000 UGG	112.4	2.6
METALS IN SOIL BY ICAP	JS16	ZN	BX300604	YGY	10-JUN-1992	25-JUN-1992	105.000	115.000 UGG	109.5	2.6
METALS IN SOIL BY ICAP	JS16	ZN	BX310304	YGY	11-JUN-1992	27-JUN-1992	98.800	104.000 UGG	105.3	1.1
METALS IN SOIL BY ICAP	JS16	ZN	BX310304	YGY	11-JUN-1992	27-JUN-1992	98.800	103.000 UGG	104.1	1.1
METALS IN SOIL BY ICAP	JS16	ZN	BX310560	YGY	15-JUN-1992	27-JUN-1992	104.000	112.000 UGG	107.7	1.3
METALS IN SOIL BY ICAP	JS16	ZN	BX310560	YGY	15-JUN-1992	27-JUN-1992	99.900	109.000 UGG	109.1	1.3
METALS IN SOIL BY ICAP	JS16	ZN	BXG60200	YGY	11-JUN-1992	25-JUN-1992	102.000	112.000 UGG	109.8	5.5
METALS IN SOIL BY ICAP	JS16	ZN	BXG60200	YGY	11-JUN-1992	25-JUN-1992	102.000	106.000 UGG	103.9	5.5
METALS IN SOIL BY ICAP	JS16	ZN	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	156.000	190.000 UGG	121.8	.5
METALS IN SOIL BY ICAP	JS16	ZN	DXG60400	ZJG	19-JUN-1992	08-JUL-1992	156.000	189.000 UGG	121.2	.5

		avg							110.5	
		minimum							103.9	
		maximum							121.8	
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.064 UGG	110.3	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.064 UGG	110.3	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.056 UGG	109.8	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.056 UGG	109.8	.0

		avg							110.1	
		minimum							109.8	
		maximum							110.3	
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.059 UGG	118.0	8.9
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.056 UGG	112.0	8.9
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.054 UGG	108.0	8.9
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.051 UGG	102.0	2.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.051 UGG	102.0	2.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.050 UGG	100.0	2.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.050	0.058 UGG	116.0	9.0
VOC'S IN SOIL BY GC/MS	LM19	12DCD4	BXG60760	ZTB	24-JUN-1992	02-JUL-1992	0.050	0.053 UGG	106.0	9.0

		avg							108.0	
		minimum							100.0	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
VOC'S IN SOIL BY GC/MS	LM19	maximum	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.061 UGG	118.0	6.9
VOC'S IN SOIL BY GC/MS	LM19	4BFB	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.057 UGG	122.0	6.9
VOC'S IN SOIL BY GC/MS	LM19	4BFB	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.057 UGG	114.0	6.9
VOC'S IN SOIL BY GC/MS	LM19	4BFB	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.055 UGG	110.0	1.8
VOC'S IN SOIL BY GC/MS	LM19	4BFB	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.055 UGG	110.0	1.8
VOC'S IN SOIL BY GC/MS	LM19	4BFB	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.054 UGG	108.0	1.8
VOC'S IN SOIL BY GC/MS	LM19	4BFB	BXG60740	ZTB	24-JUN-1992	30-JUN-1992	0.050	0.061 UGG	122.0	15.9
VOC'S IN SOIL BY GC/MS	LM19	4BFB	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.050	0.052 UGG	104.0	15.9

		avg							113.0	
		minimum							104.0	
		maximum							122.0	
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.062 UGG	106.9	1.6
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.061 UGG	105.2	1.6
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.055 UGG	107.8	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.055 UGG	107.8	.0

		avg							106.9	
		minimum							105.2	
		maximum							107.8	
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.059 UGG	101.7	1.7
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.058 UGG	100.0	1.7
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.055 UGG	107.8	1.8
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.054 UGG	105.9	1.8

		avg							103.9	
		minimum							100.0	
		maximum							107.8	
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.054 UGG	108.0	1.9
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.054 UGG	108.0	1.9
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.050	0.053 UGG	106.0	1.9
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.051 UGG	102.0	2.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.050 UGG	100.0	2.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.050	0.050 UGG	100.0	2.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BXG60760	ZTF	24-JUN-1992	02-JUL-1992	0.050	0.062 UGG	124.0	15.7
VOC'S IN SOIL BY GC/MS	LM19	MEC6D8	BXG60760	ZTB	24-JUN-1992	30-JUN-1992	0.050	0.053 UGG	106.0	15.7

		avg							106.8	
		minimum							100.0	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		maximum							124.0	
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.063 UGG	108.6	1.6
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.062 UGG	106.9	1.6
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.055 UGG	107.8	3.7
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.053 UGG	103.9	3.7

		avg							106.8	
		minimum							103.9	
		maximum							108.6	
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.054 UGG	93.1	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BX500805	ZTB	23-JUN-1992	30-JUN-1992	0.058	0.054 UGG	93.1	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.049 UGG	96.1	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG60740	ZTD	24-JUN-1992	01-JUL-1992	0.051	0.049 UGG	96.1	.0

		avg							94.6	
		minimum							93.1	
		maximum							96.1	
HG IN WATER BY CVAA	S801	HG	MXG611X1	YVX	27-JUL-1992	05-AUG-1992	5.000	4.540 UGL	90.8	1.8
HG IN WATER BY CVAA	S801	HG	MXG611X1	YVX	27-JUL-1992	05-AUG-1992	5.000	4.460 UGL	89.2	1.8

		avg							90.0	
		minimum							89.2	
		maximum							90.8	
TL IN WATER BY GFAA	SD09	TL	MXG611X1	ZK1	27-JUL-1992	13-AUG-1992	10.000	12.800 UGL	128.0	1.6
TL IN WATER BY GFAA	SD09	TL	MXG611X1	ZK1	27-JUL-1992	13-AUG-1992	10.000	12.600 UGL	126.0	1.6

		avg							127.0	
		minimum							126.0	
		maximum							128.0	
PB IN WATER BY GFAA	SD20	PB	MXG611X1	ZUI	27-JUL-1992	10-AUG-1992	40.000	42.700 UGL	106.8	.2
PB IN WATER BY GFAA	SD20	PB	MXG611X1	ZUI	27-JUL-1992	10-AUG-1992	40.000	42.600 UGL	106.5	.2

		avg							106.6	
		minimum							106.5	
		maximum							106.8	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
SE IN WATER BY GFAA	SD21	SE	MXG611X1	ZG0	27-JUL-1992	08-AUG-1992	37.500	35.300 UGL	94.1	3.2
SE IN WATER BY GFAA	SD21	SE	MXG611X1	ZG0	27-JUL-1992	08-AUG-1992	37.500	34.200 UGL	91.2	3.2

		avg							92.7	
		minimum							91.2	
		maximum							94.1	
AS IN WATER BY GFAA	SD22	AS	MXG611X1	AAD	27-JUL-1992	08-AUG-1992	37.500	48.700 UGL	129.9	.4
AS IN WATER BY GFAA	SD22	AS	MXG611X1	AAD	27-JUL-1992	08-AUG-1992	37.500	48.500 UGL	129.3	.4

		avg							129.6	
		minimum							129.3	
		maximum							129.9	
SB IN WATER BY GFAA	SD28	SB	MXG611X1	YWG	27-JUL-1992	12-SEP-1992	80.000	133.000 UGL	166.3	.8
SB IN WATER BY GFAA	SD28	SB	MXG611X1	YWG	27-JUL-1992	12-SEP-1992	80.000	132.000 UGL	165.0	.8

		avg							165.6	
		minimum							165.0	
		maximum							166.3	
METALS IN WATER BY ICAP	SS10	AG	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	50.000	52.400 UGL	104.8	7.3
METALS IN WATER BY ICAP	SS10	AG	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	50.000	48.700 UGL	97.4	7.3
METALS IN WATER BY ICAP	SS10	AG	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	50.000	46.300 UGL	92.6	.9
METALS IN WATER BY ICAP	SS10	AG	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	50.000	45.900 UGL	91.8	.9

		avg							96.7	
		minimum							91.8	
		maximum							104.8	
METALS IN WATER BY ICAP	SS10	AL	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	2000.000	2180.000 UGL	109.0	3.7
METALS IN WATER BY ICAP	SS10	AL	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	2000.000	2100.000 UGL	105.0	3.7
METALS IN WATER BY ICAP	SS10	AL	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	2000.000	2030.000 UGL	101.5	1.5
METALS IN WATER BY ICAP	SS10	AL	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	2000.000	2000.000 UGL	100.0	1.5

		avg							103.9	
		minimum							100.0	
		maximum							109.0	
METALS IN WATER BY ICAP	SS10	BA	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	2000.000	1860.000 UGL	93.0	1.6

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	BA	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	2000.000	1830.000 UGL	91.5	1.6
METALS IN WATER BY ICAP	SS10	BA	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	2000.000	1810.000 UGL	90.5	.6
METALS IN WATER BY ICAP	SS10	BA	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	2000.000	1800.000 UGL	90.0	.6

		avg							91.3	
		minimum							90.0	
		maximum							93.0	
METALS IN WATER BY ICAP	SS10	BE	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	50.000	55.400 UGL	110.8	.0
METALS IN WATER BY ICAP	SS10	BE	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	50.000	55.400 UGL	110.8	.0
METALS IN WATER BY ICAP	SS10	BE	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	50.000	53.000 UGL	106.0	.0
METALS IN WATER BY ICAP	SS10	BE	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	50.000	53.000 UGL	106.0	.0

		avg							108.4	
		minimum							106.0	
		maximum							110.8	
METALS IN WATER BY ICAP	SS10	CA	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	11100.000 UGL	111.0	4.6
METALS IN WATER BY ICAP	SS10	CA	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	10600.000 UGL	106.0	4.6
METALS IN WATER BY ICAP	SS10	CA	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	9930.000 UGL	99.3	.6
METALS IN WATER BY ICAP	SS10	CA	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	9870.000 UGL	98.7	.6

		avg							103.8	
		minimum							98.7	
		maximum							111.0	
METALS IN WATER BY ICAP	SS10	CD	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	50.000	49.000 UGL	98.0	3.5
METALS IN WATER BY ICAP	SS10	CD	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	50.000	47.300 UGL	94.6	3.5
METALS IN WATER BY ICAP	SS10	CD	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	50.000	45.800 UGL	91.6	3.3
METALS IN WATER BY ICAP	SS10	CD	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	50.000	44.300 UGL	88.6	3.3

		avg							93.2	
		minimum							88.6	
		maximum							98.0	
METALS IN WATER BY ICAP	SS10	CO	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	562.000 UGL	112.4	3.6
METALS IN WATER BY ICAP	SS10	CO	MXG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	542.000 UGL	108.4	3.6
METALS IN WATER BY ICAP	SS10	CO	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	560.000 UGL	112.0	1.3
METALS IN WATER BY ICAP	SS10	CO	MXG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	553.000 UGL	110.6	1.3

		avg							110.9	
		minimum							108.4	
		maximum							112.4	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

USATHAMA		TRDMIS							
Method Code	Test Name	Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
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METALS IN WATER BY ICAP	SS10	CR	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	200.000	192.000 UGL	96.0
METALS IN WATER BY ICAP	SS10	CR	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	200.000	188.000 UGL	94.0
METALS IN WATER BY ICAP	SS10	CR	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	200.000	196.000 UGL	98.0
METALS IN WATER BY ICAP	SS10	CR	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	200.000	194.000 UGL	97.0
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	avg							96.3	
	minimum							94.0	
	maximum							98.0	
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METALS IN WATER BY ICAP	SS10	CJ	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	250.000	246.000 UGL	98.4
METALS IN WATER BY ICAP	SS10	CJ	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	250.000	241.000 UGL	96.4
METALS IN WATER BY ICAP	SS10	CJ	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	250.000	252.000 UGL	100.8
METALS IN WATER BY ICAP	SS10	CJ	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	250.000	251.000 UGL	100.4
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	avg							99.0	
	minimum							96.4	
	maximum							100.8	
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METALS IN WATER BY ICAP	SS10	FE	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	1000.000	1190.000 UGL	119.0
METALS IN WATER BY ICAP	SS10	FE	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	1000.000	1040.000 UGL	104.0
METALS IN WATER BY ICAP	SS10	FE	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	1000.000	1050.000 UGL	105.0
METALS IN WATER BY ICAP	SS10	FE	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	1000.000	1040.000 UGL	104.0
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	avg							108.0	
	minimum							104.0	
	maximum							119.0	
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METALS IN WATER BY ICAP	SS10	K	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	11600.000 UGL	116.0
METALS IN WATER BY ICAP	SS10	K	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	11000.000 UGL	110.0
METALS IN WATER BY ICAP	SS10	K	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	11300.000 UGL	113.0
METALS IN WATER BY ICAP	SS10	K	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	11300.000 UGL	113.0
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	avg							113.0	
	minimum							110.0	
	maximum							116.0	
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METALS IN WATER BY ICAP	SS10	MG	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	10300.000 UGL	103.0
METALS IN WATER BY ICAP	SS10	MG	KXG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	10000.000 UGL	100.0
METALS IN WATER BY ICAP	SS10	MG	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	10100.000 UGL	101.0
METALS IN WATER BY ICAP	SS10	MG	KXG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	9990.000 UGL	99.9
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	avg							101.0	
	minimum							99.9	
	maximum							103.0	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	MN	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	525.000 UGL	105.0	3.5
METALS IN WATER BY ICAP	SS10	MN	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	507.000 UGL	101.4	3.5
METALS IN WATER BY ICAP	SS10	MN	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	507.000 UGL	101.4	.4
METALS IN WATER BY ICAP	SS10	MN	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	505.000 UGL	101.0	.4

		avg							102.2	
		minimum							101.0	
		maximum							105.0	
METALS IN WATER BY ICAP	SS10	NA	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	10700.000 UGL	107.0	.9
METALS IN WATER BY ICAP	SS10	NA	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	10000.000	10600.000 UGL	106.0	.9
METALS IN WATER BY ICAP	SS10	NA	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	10000.000 UGL	100.0	3.8
METALS IN WATER BY ICAP	SS10	NA	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	10000.000	9630.000 UGL	96.3	3.8

		avg							102.3	
		minimum							96.3	
		maximum							107.0	
METALS IN WATER BY ICAP	SS10	NI	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	570.000 UGL	114.0	3.6
METALS IN WATER BY ICAP	SS10	NI	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	550.000 UGL	110.0	3.6
METALS IN WATER BY ICAP	SS10	NI	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	577.000 UGL	115.4	.5
METALS IN WATER BY ICAP	SS10	NI	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	574.000 UGL	114.8	.5

		avg							113.6	
		minimum							110.0	
		maximum							115.4	
METALS IN WATER BY ICAP	SS10	V	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	537.000 UGL	107.4	2.8
METALS IN WATER BY ICAP	SS10	V	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	522.000 UGL	104.4	2.8
METALS IN WATER BY ICAP	SS10	V	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	529.000 UGL	105.8	.8
METALS IN WATER BY ICAP	SS10	V	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	525.000 UGL	105.0	.8

		avg							105.7	
		minimum							104.4	
		maximum							107.4	
METALS IN WATER BY ICAP	SS10	ZN	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	508.000 UGL	101.6	4.6
METALS IN WATER BY ICAP	SS10	ZN	MKG611X1	ZZE	27-JUL-1992	05-AUG-1992	500.000	485.000 UGL	97.0	4.6
METALS IN WATER BY ICAP	SS10	ZN	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	506.000 UGL	101.2	.4
METALS IN WATER BY ICAP	SS10	ZN	MKG602XX	YOW	24-JUN-1992	10-JUL-1992	500.000	504.000 UGL	100.8	.4

		avg							100.2	
		minimum							97.0	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		maximum							101.6	
NO2, NO3 IN WATER	TF22	NIT	MKG611X1	XXQ	27-JUL-1992	12-AUG-1992	150.000	160.000 UGL	106.7	.0
NO2, NO3 IN WATER	TF22	NIT	MKG611X1	XXQ	27-JUL-1992	12-AUG-1992	150.000	160.000 UGL	106.7	.0

		avg							106.7	
		minimum							106.7	
		maximum							106.7	
SO4 IN WATER	TT10	CL	MKG611X1	AKC	27-JUL-1992	17-AUG-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	MKG611X1	AKC	27-JUL-1992	17-AUG-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	SBK92101	XIW	19-JUN-1992	07-JUL-1992	25000.000	29000.000 UGL	116.0	.0
SO4 IN WATER	TT10	CL	SBK92101	XIW	19-JUN-1992	07-JUL-1992	25000.000	29000.000 UGL	116.0	.0

		avg							116.0	
		minimum							116.0	
		maximum							116.0	
SO4 IN WATER	TT10	SO4	MKG611X1	AKC	27-JUL-1992	17-AUG-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	MKG611X1	AKC	27-JUL-1992	17-AUG-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	SBK92101	XIW	19-JUN-1992	07-JUL-1992	250000.000	260000.000 UGL	104.0	.0
SO4 IN WATER	TT10	SO4	SBK92101	XIW	19-JUN-1992	07-JUL-1992	250000.000	260000.000 UGL	104.0	.0

		avg							104.0	
		minimum							104.0	
		maximum							104.0	

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value		Percent Recovery	RPD
								Units			
	00	ALK	D-1-2	YUL	07-APR-1992	21-APR-1992	44600.000	41000.000	UGL	91.9	2.5
	00	ALK	D-1-2	YUL	07-APR-1992	21-APR-1992	44600.000	40000.000	UGL	89.7	2.5

		avg	minimum	maximum						90.8	
	00	TOC	D-1-1	YVB	07-APR-1992	16-APR-1992	20000.000	20000.000	UGL	100.0	6.2
	00	TOC	D-1-1	YVB	07-APR-1992	16-APR-1992	20000.000	18800.000	UGL	94.0	6.2

		avg	minimum	maximum						97.0	
	99	NO2	D-1-2	XXI	07-APR-1992	09-APR-1992	150.000	154.000	UGL	102.7	.0
	99	NO2	D-1-2	XXI	07-APR-1992	09-APR-1992	150.000	154.000	UGL	102.7	.0

		avg	minimum	maximum						102.7	
TL IN WATER BY GFAA	S009	TL	D-1-2	XOS	07-APR-1992	23-APR-1992	10.000	10.200	UGL	102.0	1.0
	S009	TL	D-1-2	XOS	07-APR-1992	23-APR-1992	10.000	10.100	UGL	101.0	1.0

		avg	minimum	maximum						101.5	
PB IN WATER BY GFAA	S020	PB	D-1-2	XUM	07-APR-1992	22-APR-1992	40.000	42.200	UGL	105.5	12.3
	S020	PB	D-1-2	XUM	07-APR-1992	22-APR-1992	40.000	37.300	UGL	93.3	12.3

		avg	minimum	maximum						99.4	
SE IN WATER BY GFAA	S021	SE	D-1-2	XTS	07-APR-1992	22-APR-1992	37.500	40.400	UGL	107.7	1.2
	S021	SE	D-1-2	XTS	07-APR-1992	22-APR-1992	37.500	39.900	UGL	106.4	1.2

		avg	minimum	maximum						107.1	

TABLE F12
MS/MSD Quality Control Report
Installation: Fort Devens, MA (DV)
Group: 6
MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRMIS Sample Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		maximum							107.7	
AS IN WATER BY GFAA	SD22	AS	D-1-2	YIH	07-APR-1992	22-APR-1992	37.500	42.600 UGL	113.6	1.7
AS IN WATER BY GFAA	SD22	AS	D-1-2	YIH	07-APR-1992	22-APR-1992	37.500	41.900 UGL	111.7	1.7

		avg							112.7	
		minimum							111.7	
		maximum							113.6	
SB IN WATER BY GFAA	SD28	SB	D-1-2	YNA	07-APR-1992	22-APR-1992	80.000	73.700 UGL	92.1	2.5
SB IN WATER BY GFAA	SD28	SB	D-1-2	YNA	07-APR-1992	22-APR-1992	80.000	71.900 UGL	89.9	2.5

		avg							91.0	
		minimum							89.9	
		maximum							92.1	
METALS IN WATER BY ICAP	SS10	AG	D-1-1	YOG	07-APR-1992	23-APR-1992	50.000	51.000 UGL	102.0	.8
METALS IN WATER BY ICAP	SS10	AG	D-1-1	YOG	07-APR-1992	23-APR-1992	50.000	50.600 UGL	101.2	.8

		avg							101.6	
		minimum							101.2	
		maximum							102.0	
METALS IN WATER BY ICAP	SS10	AL	D-1-1	YOG	07-APR-1992	23-APR-1992	2000.000	1990.000 UGL	99.5	1.5
METALS IN WATER BY ICAP	SS10	AL	D-1-1	YOG	07-APR-1992	23-APR-1992	2000.000	1960.000 UGL	98.0	1.5

		avg							98.8	
		minimum							98.0	
		maximum							99.5	
METALS IN WATER BY ICAP	SS10	BA	D-1-1	YOG	07-APR-1992	23-APR-1992	2000.000	1820.000 UGL	91.0	1.7
METALS IN WATER BY ICAP	SS10	BA	D-1-1	YOG	07-APR-1992	23-APR-1992	2000.000	1790.000 UGL	89.5	1.7

		avg							90.3	
		minimum							89.5	
		maximum							91.0	
METALS IN WATER BY ICAP	SS10	BE	D-1-1	YOG	07-APR-1992	23-APR-1992	50.000	56.600 UGL	113.2	.0
METALS IN WATER BY ICAP	SS10	BE	D-1-1	YOG	07-APR-1992	23-APR-1992	50.000	56.600 UGL	113.2	.0

		avg							113.2	

APPENDIX FS (SUPPLEMENTAL SITE INVESTIGATION)

DATA QUALITY REPORT

1.0 ANALYTICAL METHODS

Aqueous and soil samples collected for the Supplemental Site Investigation (SSI) at Group 3,5, and 6 Study Areas were analyzed in an USAEC-certified laboratory for Fort Devens Project Analyte List (PAL) analytes. The Fort Devens PAL is presented in Appendix E. Laboratory analyses for the PAL organics and inorganics are considered approximately equivalent to USEPA analytical support Level III quality data. All laboratory analyses were completed using the 1990 USATHAMA QA Plan. All data used in this report came directly from the USAEC's IRDMIS system. Samples discussed below pertain only to those collected for the Group 3,5 and 6 SSI sampling effort.

A list of USAEC-certified methods which were used for analysis of field samples is provided in Volume I, Section 3, Table 3-1 of this report. The table includes a description of the methods used as well as equivalent EPA methods, where they exist. The method numbers (i.e., method JS16) are specific to the project and to the particular laboratory doing the analyses. Certified reporting limits (CRLs) are established for each analyte and presented in Appendix E.

2.0 QUALITY CONTROL BLANK RESULTS

2.1 INTRODUCTION

A quality control review was completed for method blanks, rinsate blanks, and trip blanks associated with the SSI. This discussion is intended to provide an evaluation of data quality based on method blank and field quality control data. Frequency tables were generated for all quality control blanks generated during the SSI. The tables present results by analytical method and were used to identify any target analytes that appeared in blanks. The rate at which these analytes were found with respect to the total number of blanks, and the concentration range reported, are the key components of the frequency tables. Analytes which are not listed on the tables were not detected at the concentration above the CRL.

2.2 METHOD BLANKS

Laboratory quality control blanks that were included in the Group 3, 5 and 6 SSI sampling effort consisted of method blanks. Method blanks were analyzed to determine if compound analytes were introduced at the laboratory during the processing of field samples. Previously analyzed deionized water was used to prepare method blanks at the laboratory. Method blanks were analyzed following the same procedures used to analyze field samples. A method blank was analyzed in each analytical batch and tracked by lot number in the USAECs IDMIS. Table FS-1 summarizes analytical data for all method blanks analyzed for the Group 3, 5 & 6 SSI. Table FS-2 summarizes analytes detected above CRL, the frequency of detection, and the minimum and maximum detected concentration in the method blanks.

Inorganics

Two soil method blanks were analyzed to determine if there was laboratory contamination of PAL inorganics. Four soil method blanks were analyzed for lead contamination. Lead was the only PAL element detected in any of these blanks. It was detected at concentrations of 0.582 to 0.755 $\mu\text{g/g}$ in three of four

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method blanks. Concentrations of this magnitude for lead are representative of concentrations in the soil used for the blanks.

Two aqueous method blanks were analyzed in conjunction with aqueous inorganic samples. No target inorganic analytes were detected above respective CRLs in associated method blanks. This indicated that there was no contamination of PAL inorganics from the laboratory.

SVOCs

USAEC method LM18 was used to analyze soil method blanks for semivolatile organic compound (SVOC) contamination. Di-ethylphthalate was the only target compound detected above CRL. It was detected in 1 of 2 method blanks. Phthalate esters have been defined by the USEPA as common laboratory contaminants (USEPA, 1991).

USAEC method UM18 was used to analyze aqueous method blanks for SVOC contamination. Bis(2-ethylhexyl)phthalate (BEHP) was the only target SVOC detected. It was detected in two of 5 method blanks at concentrations ranging from 5.1 to 6.2 $\mu\text{g/L}$. BEHP has been defined by the USEPA as a common laboratory contaminant.

Overall, the method blank data indicate that there was little SVOC contamination attributed to laboratory activities.

VOCs

USAEC method LM19 was used to analyze soil method blanks for VOC contamination. Trifluorochloromethane was the most commonly detected volatile organic compound (VOC). It was detected in 2 of 7 soil method blanks. Trifluorochloromethane is frequently used as a solvent in commercial laboratories. Trifluorochloromethane has been defined as a common laboratory contaminant by the USEPA (USEPA, 1991). Toluene was the only other target VOC detected. It was detected in 1 of 7 method blanks at 0.00086 $\mu\text{g/g}$.

USAEC method UM20 was used to analyze nine aqueous method blanks for VOC contamination. Two target VOCs, acetone and chloroform, were detected above CRL. Acetone was detected at 18 $\mu\text{g/L}$ in one of nine method blanks.

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Acetone is considered a common laboratory contaminant (USEPA, 1991). Chloroform was detected in one blank out of nine at a concentration of 0.73 $\mu\text{g/L}$. Chloroform is often present in chlorinated drinking water supplies. Concentrations of acetone and chloroform in field samples similar to those measured in method blanks may be attributed to laboratory contamination.

In general, the method blank data indicated that there was little VOC contamination attributable to laboratory activities.

PCBs

One method blank was analyzed for polychlorinated biphenyl (PCB) contamination. No target compounds were detected above CRL for any PCB compounds.

Other Methods

Three soil method blanks were analyzed for concentrations of total organic carbon (TOC). TOC concentrations for all three blanks were below the CRL of 360 $\mu\text{g/g}$.

Four soil method blanks were analyzed for total petroleum hydrocarbon (TPHC) contamination. TPHC concentrations for all four method blanks were below the CRL of 28.5 $\mu\text{g/g}$.

Aqueous method blanks were also analyzed for the following analytes: alkalinity, bicarbonate ion, hardness, TPHC, and total suspended solids (TSS).

Two method blanks were analyzed for concentrations of alkalinity. Alkalinity was not detected above the CRL of 5000 $\mu\text{g/L}$ in any of the method blanks.

Three method blanks were analyzed for bicarbonate ion. Bicarbonate was not detected above the CRL of 6100 $\mu\text{g/L}$ in any of the method blanks.

One method blank was analyzed for hardness. Hardness was not detected above the CRL of 1000 $\mu\text{g/L}$ in this blank.

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Three aqueous method blanks were analyzed for concentrations of TPHC. TPHC was not detected above the CRL of $171 \mu\text{g/L}$ in any of the associated method blanks.

Three aqueous method blanks were analyzed for concentrations of TSS. TSS were not detected above the CRL of $4000 \mu\text{g/L}$ in the associated method blanks.

2.3 FIELD QUALITY CONTROL

2.3.1 Trip Blanks

Trip blanks were prepared by the USAEC-certified laboratory and shipped to the ABB-ES field office at Fort Devens. The water used for the trip blanks was previously analyzed by the laboratory. One pair of trip blanks were shipped back to the laboratory with every shipment that contained soil or water samples that were identified for VOC analysis. The purpose of the trip blanks was to determine whether cross contamination by VOCs was occurring during shipment of samples. Eleven trip blanks were analyzed during the Group 3, 5, and 6 SSI. Trip blank data are summarized on Table FS-3. Table FS-4 summarizes analytes detected above the CRL, the frequency of detection, and the minimum and maximum detected concentration in the method blanks.

The following target compounds were detected above associated CRLs in trip blanks analyzed for Group 3, 5 & 6 SSI: trifluorochloromethane, methylene chloride, chloroform, and toluene. Methylene chloride was the most common contaminant detected. It was detected in 3 of 14 trip blanks in concentrations ranging from 2.8 to $13 \mu\text{g/L}$. Methylene chloride is a solvent widely used by commercial laboratories. The presence of methylene chloride in trip blanks may be attributed to laboratory contamination rather than cross contamination between samples.

Trifluorochloromethane, chloroform and toluene were detected in trip blanks at lower frequencies than methylene chloride. All three of these compounds were detected in method blanks at concentrations similar to those reported for the trip blanks. The presence of these compounds in the trip blanks are also attributed to laboratory contamination.

2.3.2 Rinsate Blanks

Rinsate blanks were collected from field equipment by pouring laboratory prepared deionized water over sampling equipment (i.e., split spoons) and into sample containers. The purpose of collecting rinse blanks was to determine whether or not decontamination procedures effectively removed contamination from previous sample locations. A summary of all rinse blank results is found in Table FS-5. Detections of analytes above associated CRLs, the frequency of detection, and the minimum and maximum concentrations are presented in Table FS-6.

Inorganics

Six rinsate blanks were analyzed for inorganics. The following elements were detected in one or more rinsate blank: cobalt, chromium, copper, iron, potassium, and manganese. The concentrations at which these elements were detected is included in Table FS-5. None of these elements were detected in associated method blanks. The source of contaminations may be carry-over from previous sample locations.

SVOCs

Two rinsate blanks were analyzed for SVOCs. Bis(2-ethylhexyl)phthalate, dodecanoic acid, and 2-ethyl-1-hexanol were all detected in one or more rinse blanks. Bis(2-ethylhexyl)phthalate is defined by the USEPA as a common laboratory contaminant.

Dodecanoic acid and 2-ethyl-1-hexanol are non-target SVOCs which were detected in the rinse blanks.

VOCs

Four equipment rinse blanks were analyzed for VOCs. The following VOCs were detected in one or more rinse blanks: 1,1,1-trichloroethene, 1,2-dichloroethane, acetone, methylene chloride, chloroform, and toluene. Methylene chloride and acetone are defined by the USEPA as common laboratory contaminants. Toluene and chloroform were detected in method blanks at concentrations similar to those

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reported for rinse blanks. This indicates that these compounds were likely introduced from the laboratory.

Detections of 1,1,1-trichloroethene and 1,2-dichloroethane represent introduced contamination. There were no detections of either compound in the method blank data. This indicated that the source of contamination for 1,1,1-trichloroethene and 1,2-dichloroethane was not the laboratory. Concentrations of these compounds reported in field samples at similar concentration to those reported in the rinse blanks may represent carry-over contamination from sampling equipment.

PCBs

Two rinse blanks were analyzed for PCBs with no reported detections above associated CRLs.

3.0 MATRIX SPIKE AND DUPLICATE QUALITY CONTROL

3.1 INTRODUCTION

Matrix Spikes

Matrix spikes and matrix spike duplicates (MS/MSDs) were collected at a rate of one per 20 environmental samples. MS/MSD samples were collected for the following parameters: inorganics, PCBs, TPH, hardness, alkalinity, bicarbonate, nitrate/nitrite, and sulfate. All MS/MSD sample results have been tabulated and are presented in Tables FS-7 and FS-8. Data have been segregated by method to show recovery trends and to assess the accuracy of particular analyses. Matrix spikes have been paired with corresponding matrix spike duplicates to make recovery comparisons. The relative percent differences (RPDs) between recoveries of the matrix spikes and matrix spike duplicates have been calculated and are included in the table. The relative percent difference was used to measure the analytical precision of the results.

The criteria used for interpreting MS/MSD data are from the analytical USEPA CLP protocols and the POP for Fort Devens, Volume III. The EPA CLP requirement for inorganic recoveries is 100% + or - 25%, for PCBs advisory limits are 60 to 150%. A discussion of the results is found in Section 3.2.

Duplicates

Field duplicate samples were collected at the same rate as the MS/MSD samples. The sample ID differentiates duplicates from other samples by using a "D" as the second character in the identification code. The purpose of analyzing duplicate samples was to measure the precision of the analytical results. Duplicate analysis also measured the precision and effects of sampling techniques. Precision of these processes was measured by the calculation of the relative percent difference (RPD) for all runs of a particular method. The RPD was calculated as the difference between the maximum and minimum results divided by the average of all results. Duplicate data and the RPD between field duplicates is presented in Tables FS-9 and FS-10.

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USEPA Region 1 guidelines were used to assess the RPDs of duplicate results. These guidelines specify an RPD of no greater than 30% for water samples and an RPD of no greater than 50% for soils. Interpretations of these results are contained in Section 3.3.

3.2 GROUP 3, 5 & 6 SSI MATRIX SPIKES

Inorganics

Four MS/MSD soil inorganic samples were analyzed to determine matrix effects. The following elements had recoveries outside of USEPA Region I limits for inorganics: aluminum, antimony, arsenic, iron, lead, manganese, mercury, selenium, silver, and zinc. Seventy-five percent of lead recoveries were outside of USEPA Region I CLP recovery criteria. Fifty percent of iron recoveries were outside recovery limits.

One MS/MSD aqueous inorganic sample was analyzed to determine matrix effects. All recoveries were within USEPA Region I recovery criteria of 30%.

PCBs

One MS/MSD soil sample, BX440805 was analyzed for PCBs. The recoveries of all PCB compounds were within USEPA Region I CLP advisory of 60 to 150% for this sample.

Other Methods

Two MS/MSD soil samples were analyzed for TPHC. All recoveries were within USEPA Region I CLP recovery criteria of 75 - 125%.

One aqueous MS/MSD sample was analyzed for the following analyses: hardness, alkalinity, bicarbonate, nitrate/nitrite, and sulfate. All recoveries were within USEPA Region I CLP criteria of 75 - 125%.

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3.3 GROUP 3, 5 & 6 SSI DUPLICATES

Inorganics

Four soil duplicate samples, SD210600, BD381210, BD381805, and BD440905 were analyzed for inorganics. For BD440905, all inorganic RPD values met USEPA Region I criteria. BD381210 had a single target analyte that failed to meet criteria. The element which did not meet USEPA RPD criteria for BD381210 was lead. The RPD for lead was 51% which just barely exceeds the USEPA Region I criteria for inorganics in soil. The duplicate sample SD210600 had 14 of 22 target elements failing to meet USEPA Region I criteria. These elements are summarized in Table FS-10. The discrepancy in duplicate concentrations indicates that this sample had a high degree of heterogeneity of these elements throughout the matrix.

Two sample duplicate pairs, MDG308X2 and MDG613X1, were analyzed for inorganics. For MDG308X2 the following analytes exceeded criteria: lead, aluminum, copper, iron, and potassium. For MDG613X1 only lead failed to meet USEPA Region I criteria. All elements for which the RPDs of reported concentrations exceeded USEPA Region I criteria are summarized in Table FS-9.

SVOCs

One soil duplicate sample, BD440905 was analyzed by USAEC method LM18 for SVOCs. The RPDs of concentrations of the target compounds fluoranthene, phenanthrene, and pyrene exceeded USEPA Region I guidelines. RPD values for these SVOCs were 114.5%, 88.1%, and 113.7%, respectively. Because of the poor precision of these concentrations, sample results for fluoranthene, phenanthrene, and pyrene should be considered estimated.

A single duplicate pair, MDG613X1 was analyzed for SVOCs by USAEC method UM18. All RPD values calculated were within USEPA Region I criteria.

VOCs

One soil duplicate sample, BDG61205 was analyzed by USAEC method LM19 for VOCs. The RPDs of all VOCs were within USEPA Region I criteria except tetrachloroethylene. The RPD for tetrachloroethylene was 110.2%. This

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indicates poor precision of the tetrachloroethylene results for this sample. Sample concentrations of this compound should be considered estimated for BDG61205.

A single duplicate pair, MDG613X1 was analyzed for VOCs by USAEC method UM20. All RPD values calculated were within USEPA Region I criteria of 30%.

Other Methods

Two soil duplicate samples, BD440905 and SD210600, were analyzed for TPHC. RPD values were within criteria.

Nitrate/Nitrite - Two duplicate samples, MDG308X2 and MDG613X1, were analyzed for nitrate/nitrite. The RPD values were below 30% for both samples.

Sulfate - Two duplicate samples, MDG308X2 and MDG613X1, were analyzed for sulfate. The RPD values for both samples were less than 30% indicating good precision of these results.

Hardness - A single duplicate pair, MDG613X1 was analyzed for hardness. The associated RPD value was calculated to be 190.7%. This indicates disagreement of the results for hardness. Hardness values for MDG613X1 should be considered estimated.

TPHC - A single duplicate pair, MDG613X1 was analyzed for TPHC. The RPD of these TPHC concentrations for this sample were less than 30%.

TSS - Two duplicate samples, MDG308X2 and MDG613X1, were analyzed for TSS. The RPD value for MDG613X1 was 40.9%.

Alkalinity - A single duplicate pair, MDG308X2 was analyzed for alkalinity. The RPD of alkalinity concentrations for MDG308X2 was less than 30%.

Bicarbonate - Two duplicate samples, MDG308X2 and MDG613X1, were analyzed for bicarbonate ion concentrations. The RPD value for MDG613X1 was 67%. This indicates a lack of agreement for bicarbonate ion concentrations for this sample.

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4.0 SURROGATE RECOVERY SUMMARY

4.1 INTRODUCTION

Surrogates are compounds chemically similar to target compounds which were spiked into all samples to determine the accuracy of the method. Potential matrix effects can also be identified by the analysis of surrogate recoveries. SVOC surrogate recoveries are presented in Table FS-11. VOC surrogate recoveries were tabulated and are presented in Table FS-12. Assessments of surrogate recoveries were based on limits specified in the Fort Devens POP, Volume III. Interpretation of these results are contained in Section 4.2.

4.2 SURROGATE SUMMARY

SVOCs

Surrogate recoveries for SVOC analyses are summarized on Table FS-11. Recovery criteria and percentage of analyses for soil samples within criteria are shown in the table below.

Surrogate Standards	Recovery Criteria	% Within Criteria	Average Recovery
2-Fluorophenol	25-121	43	115.9
Phenol-D6	24-113	56	100.2
2,4,6-Tribromophenol	19-122	96	91.4
Nitrobenzene-D5	23-120	96	89.4
2-Fluorobiphenyl	3-115	96	87.1
Terphenyl-D14	8-137	96	67.0

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Recoveries were extremely low for all surrogates associated with SX440300. Recoveries ranged from 0.6 to 10 percent. This would indicate a low bias for any SVOC results associated with sample SX440300. Surrogate recoveries of 2-fluorophenol were within USEPA Region I criteria for 43% of the samples. Surrogate recoveries of phenol-D6 were within criteria for 56% of the samples analyzed. Recoveries of these surrogates for all samples with the exception of SX440300, exceeded the upper range of criteria. Surrogate data for 2-fluorophenol and phenol-D6 indicate a high bias for all SVOC results.

Recovery criteria and the percentage of aqueous analyses within criteria are summarized in the table below. For surrogates 2-fluorophenol and phenol-D6 all surrogate recoveries failing USEPA Region I criteria were above the upper range of criteria.

In general the SVOC surrogate data indicate that there were no matrix effects. The surrogate data also indicate that there was good accuracy for the aqueous SVOC method.

Surrogate Standards	Recovery Criteria	% Within Criteria	Average Recovery
2-Fluorophenol	21-100	21	109.1
Phenol-D6	10-94	78	92.3
2,4,6-Tribromophenol	10-123	100	68.2
Nitrobenzene-D5	35-114	100	86.7
2-Fluorobiphenyl	43-116	100	80.7
Terphenyl-D14	33-141	100	85.1

VOCs

Surrogate recoveries for soil VOC analyses are summarized on Table FS-12. Recovery criteria for soil samples are as follows: 1,2-dichloroethane-D4 70-121, 4-bromofluorobenzene 74-121, and toluene-D8 81-117. The average surrogate

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recovery for 1,2-dichloroethane-D4 was 95.3 percent. Thirty-two out of thirty-three (97%) surrogate recoveries were within this criteria. The average surrogate recovery for 4-bromofluorobenzene was 104.4 percent. Thirty-two out of thirty-three (97%) surrogate recoveries were within criteria. The average surrogate recovery for toluene-D8 was 94.3 percent. Thirty-two out of thirty-three (97%) surrogate recoveries were within criteria.

Surrogate recoveries for aqueous VOC analyses are summarized in Table FS-11. Surrogate recovery criteria are as follows: 1,2-dichloroethane-D4 76-114, 4-bromofluorobenzene 86-115, and toluene-D8 88-110. The average recovery for 1,2-dichloroethane-D4 was 113.4 percent. Seventy-two percent of the recoveries were within criteria. All recoveries that were outside of criteria were above recovery limits. The average recovery for 4-bromofluorobenzene was 89.5 percent. Ninety-three percent of the recoveries met criteria. The average recovery for toluene-D8 was 92.0 percent. All recoveries were within criteria.

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Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
	00	HARD	FDPA		05-JUL-93	05-JUL-93	<	1000 UGL
		TOC	FDPA		22-JUN-93	22-JUN-93	<	100 UGG
		TPHC	FDCA		15-JUN-93	17-JUN-93	<	28.5 UGG
		TPHC	FDCA		22-JUN-93	23-JUN-93	<	28.5 UGG
		TPHC	FDHA		28-JUN-93	29-JUN-93	<	28.5 UGG
		TPHC	FDUA		08-JUL-93	09-JUL-93	<	171 UGL
		TPHC	ITHA		13-OCT-93	13-OCT-93	<	171 UGL
		TPHC	ITLA		20-OCT-93	21-OCT-93	<	171 UGL
		TSS	FDXA		29-JUN-93	29-JUN-93	<	4000 UGL
		TSS	IQUA		27-SEP-93	27-SEP-93	<	4000 UGL
		TSS	IQUA		29-SEP-93	29-SEP-93	<	4000 UGL
TOC IN SOIL	9060	TOC	ZECG		08-FEB-95	08-FEB-95	<	360 UGG
TOC IN SOIL		TOC	ZEJE		06-SEP-94	06-SEP-94	<	360 UGG
TPH	9071	TPHC	ZEKE		07-SEP-94	08-SEP-94	<	28 UGG
	99	ALK	FDVA		06-JUL-93	06-JUL-93	<	5000 UGL
		ALK	IJYA		27-SEP-93	27-SEP-93	<	5 UGL
		HCO3	FDVA		06-JUL-93	06-JUL-93	<	6100 UGL
		HCO3	FVYA		22-JUL-93	22-JUL-93	<	6100 UGL
		HCO3	IJYA		27-SEP-93	27-SEP-93	<	6.1 UGL
HG IN SOIL BY GFAA	J801	HG	EBUA		14-JUN-93	14-JUN-93	<	.05 UGG
HG IN SOIL BY GFAA		HG	EBYA		01-JUL-93	01-JUL-93	<	.05 UGG
SE IN SOIL BY GFAA	JD15	SE	EDFA		10-JUN-93	15-JUN-93	<	.25 UGG
SE IN SOIL BY GFAA		SE	EDGA		28-JUN-93	06-JUL-93	<	.25 UGG
PB IN SOIL BY GFAA	JD17	PB	CJUA		17-JUN-93	21-JUN-93		.426 UGG
PB IN SOIL BY GFAA		PB	CJUA		10-JUN-93	14-JUN-93		.582 UGG
PB IN SOIL BY GFAA		PB	CUYA		07-JUL-93	08-JUL-93	<	.177 UGG
PB IN SOIL BY GFAA		PB	CUZA		28-JUN-93	07-JUL-93		.755 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
AS IN SOIL BY GFAA	JD19	AS	ELKA		10-JUN-93	14-JUN-93	<	.25 UGG
AS IN SOIL BY GFAA		AS	ELOA		28-JUN-93	13-JUL-93	<	.25 UGG
TL IN SOIL BY GFAA	JD24	TL	ZLX		10-JUN-93	15-JUN-93	<	.5 UGG
TL IN SOIL BY GFAA		TL	ZLY		28-JUN-93	01-JUL-93	<	.5 UGG
SB IN SOIL BY GFAA	JD25	SB	ZMV		10-JUN-93	15-JUN-93	<	1.09 UGG
SB IN SOIL BY GFAA		SB	ZMW		09-JUL-93	21-JUL-93	<	1.09 UGG
METALS IN SOIL BY ICAP	JS16	AG	EXBA		15-JUN-93	18-JUN-93	<	.589 UGG
METALS IN SOIL BY ICAP		AG	EXCA		29-JUN-93	30-JUN-93	<	.589 UGG
METALS IN SOIL BY ICAP		AL	EXBA		15-JUN-93	18-JUN-93	<	2.35 UGG
METALS IN SOIL BY ICAP		AL	EXCA		29-JUN-93	30-JUN-93	<	2.35 UGG
METALS IN SOIL BY ICAP		BA	EXBA		15-JUN-93	18-JUN-93	<	5.18 UGG
METALS IN SOIL BY ICAP		BA	EXCA		29-JUN-93	30-JUN-93	<	5.18 UGG
METALS IN SOIL BY ICAP		BE	EXBA		15-JUN-93	18-JUN-93	<	.5 UGG
METALS IN SOIL BY ICAP		BE	EXCA		29-JUN-93	30-JUN-93	<	.5 UGG
METALS IN SOIL BY ICAP		CA	EXBA		15-JUN-93	18-JUN-93	<	100 UGG
METALS IN SOIL BY ICAP		CA	EXCA		29-JUN-93	30-JUN-93	<	100 UGG
METALS IN SOIL BY ICAP		CD	EXBA		15-JUN-93	18-JUN-93	<	.7 UGG
METALS IN SOIL BY ICAP		CD	EXCA		29-JUN-93	30-JUN-93	<	.7 UGG
METALS IN SOIL BY ICAP		CO	EXBA		15-JUN-93	18-JUN-93	<	1.42 UGG
METALS IN SOIL BY ICAP		CO	EXCA		29-JUN-93	30-JUN-93	<	1.42 UGG
METALS IN SOIL BY ICAP		CR	EXBA		15-JUN-93	18-JUN-93	<	4.05 UGG
METALS IN SOIL BY ICAP		CR	EXCA		29-JUN-93	30-JUN-93	<	4.05 UGG
METALS IN SOIL BY ICAP		CU	EXBA		15-JUN-93	18-JUN-93	<	.965 UGG
METALS IN SOIL BY ICAP		CU	EXCA		29-JUN-93	30-JUN-93	<	.965 UGG
METALS IN SOIL BY ICAP		FE	EXBA		15-JUN-93	18-JUN-93	<	3.68 UGG
METALS IN SOIL BY ICAP		FE	EXCA		29-JUN-93	30-JUN-93	<	3.68 UGG
METALS IN SOIL BY ICAP	K	K	EXBA		15-JUN-93	18-JUN-93	<	100 UGG
METALS IN SOIL BY ICAP		K	EXCA		29-JUN-93	30-JUN-93	<	100 UGG
METALS IN SOIL BY ICAP		MG	EXBA		15-JUN-93	18-JUN-93	<	100 UGG
METALS IN SOIL BY ICAP		MG	EXCA		29-JUN-93	30-JUN-93	<	100 UGG
METALS IN SOIL BY ICAP	MN	MN	EXBA		15-JUN-93	18-JUN-93	<	2.05 UGG
METALS IN SOIL BY ICAP		MN	EXCA		29-JUN-93	30-JUN-93	<	2.05 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
METALS IN SOIL BY ICAP	JS16	MN	EXCA	EXCA	29-JUN-93	30-JUN-93	2.05	UGG
METALS IN SOIL BY ICAP		NA	EXBA	EXBA	15-JUN-93	18-JUN-93	100	UGG
METALS IN SOIL BY ICAP		NA	EXBA	EXBA	29-JUN-93	30-JUN-93	100	UGG
METALS IN SOIL BY ICAP		NI	EXBA	EXBA	15-JUN-93	18-JUN-93	1.71	UGG
METALS IN SOIL BY ICAP		NI	EXBA	EXBA	29-JUN-93	30-JUN-93	1.71	UGG
METALS IN SOIL BY ICAP		V	EXBA	EXBA	15-JUN-93	18-JUN-93	3.39	UGG
METALS IN SOIL BY ICAP		V	EXBA	EXBA	29-JUN-93	30-JUN-93	3.39	UGG
METALS IN SOIL BY ICAP	LH16	ZN	EXBA	EXBA	15-JUN-93	18-JUN-93	8.03	UGG
METALS IN SOIL BY ICAP		ZN	EXCA	EXCA	29-JUN-93	30-JUN-93	8.03	UGG
		PCB016	DHFA	DHFA	15-JUN-93	18-JUN-93	.067	UGG
		PCB221	DHFA	DHFA	15-JUN-93	18-JUN-93	.082	UGG
		PCB232	DHFA	DHFA	15-JUN-93	18-JUN-93	.082	UGG
		PCB242	DHFA	DHFA	15-JUN-93	18-JUN-93	.082	UGG
		PCB248	DHFA	DHFA	15-JUN-93	18-JUN-93	.082	UGG
	LM18	PCB254	DHFA	DHFA	15-JUN-93	18-JUN-93	.082	UGG
		PCB260	DHFA	DHFA	15-JUN-93	18-JUN-93	.08	UGG
BNA'S IN SOIL BY GC/MS		124TCB	EAPA	EAPA	15-JUN-93	18-JUN-93	.04	UGG
BNA'S IN SOIL BY GC/MS		124TCB	EATA	EATA	21-JUN-93	24-JUN-93	.04	UGG
BNA'S IN SOIL BY GC/MS		120CLB	EAPA	EAPA	15-JUN-93	18-JUN-93	.11	UGG
BNA'S IN SOIL BY GC/MS		120CLB	EATA	EATA	21-JUN-93	24-JUN-93	.11	UGG
BNA'S IN SOIL BY GC/MS		12DPH	EAPA	EAPA	15-JUN-93	18-JUN-93	.14	UGG
BNA'S IN SOIL BY GC/MS		12DPH	EATA	EATA	21-JUN-93	24-JUN-93	.14	UGG
BNA'S IN SOIL BY GC/MS		130CLB	EAPA	EAPA	15-JUN-93	18-JUN-93	.13	UGG
BNA'S IN SOIL BY GC/MS		130CLB	EATA	EATA	21-JUN-93	24-JUN-93	.13	UGG
BNA'S IN SOIL BY GC/MS		140CLB	EAPA	EAPA	15-JUN-93	18-JUN-93	.098	UGG
BNA'S IN SOIL BY GC/MS		140CLB	EATA	EATA	21-JUN-93	24-JUN-93	.098	UGG
BNA'S IN SOIL BY GC/MS		245TCP	EAPA	EAPA	15-JUN-93	18-JUN-93	.1	UGG
BNA'S IN SOIL BY GC/MS		245TCP	EATA	EATA	21-JUN-93	24-JUN-93	.1	UGG
BNA'S IN SOIL BY GC/MS		246TCP	EAPA	EAPA	15-JUN-93	18-JUN-93	.17	UGG
BNA'S IN SOIL BY GC/MS		246TCP	EATA	EATA	21-JUN-93	24-JUN-93	.17	UGG
BNA'S IN SOIL BY GC/MS		240CLP	EAPA	EAPA	15-JUN-93	18-JUN-93	.18	UGG
BNA'S IN SOIL BY GC/MS		240CLP	EATA	EATA	21-JUN-93	24-JUN-93	.18	UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

USATHAMA Method Code	Method Description	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
LM18	BNA'S IN SOIL BY GC/MS	240MPN	EAPA		15-JUN-93	18-JUN-93	.69	UGG
	BNA'S IN SOIL BY GC/MS	240MPN	EATA		21-JUN-93	24-JUN-93	.69	UGG
	BNA'S IN SOIL BY GC/MS	240NP	EAPA		15-JUN-93	18-JUN-93	1.2	UGG
	BNA'S IN SOIL BY GC/MS	240NP	EATA		21-JUN-93	24-JUN-93	1.2	UGG
	BNA'S IN SOIL BY GC/MS	240NT	EAPA		15-JUN-93	18-JUN-93	.14	UGG
	BNA'S IN SOIL BY GC/MS	240NT	EATA		21-JUN-93	24-JUN-93	.14	UGG
	BNA'S IN SOIL BY GC/MS	260NT	EAPA		15-JUN-93	18-JUN-93	.085	UGG
	BNA'S IN SOIL BY GC/MS	260NT	EATA		21-JUN-93	24-JUN-93	.085	UGG
	BNA'S IN SOIL BY GC/MS	2CLP	EAPA		15-JUN-93	18-JUN-93	.06	UGG
	BNA'S IN SOIL BY GC/MS	2CLP	EATA		21-JUN-93	24-JUN-93	.06	UGG
	BNA'S IN SOIL BY GC/MS	2CNAP	EAPA		15-JUN-93	18-JUN-93	.036	UGG
	BNA'S IN SOIL BY GC/MS	2CNAP	EATA		21-JUN-93	24-JUN-93	.036	UGG
	BNA'S IN SOIL BY GC/MS	2NMAP	EAPA		15-JUN-93	18-JUN-93	.049	UGG
	BNA'S IN SOIL BY GC/MS	2NMAP	EATA		21-JUN-93	24-JUN-93	.049	UGG
	BNA'S IN SOIL BY GC/MS	2NP	EAPA		15-JUN-93	18-JUN-93	.029	UGG
	BNA'S IN SOIL BY GC/MS	2NP	EATA		21-JUN-93	24-JUN-93	.029	UGG
	BNA'S IN SOIL BY GC/MS	2NANIL	EAPA		15-JUN-93	18-JUN-93	.062	UGG
	BNA'S IN SOIL BY GC/MS	2NANIL	EATA		21-JUN-93	24-JUN-93	.062	UGG
	BNA'S IN SOIL BY GC/MS	2NP	EAPA		15-JUN-93	18-JUN-93	.14	UGG
	BNA'S IN SOIL BY GC/MS	2NP	EATA		21-JUN-93	24-JUN-93	.14	UGG
	BNA'S IN SOIL BY GC/MS	330CBD	EAPA		15-JUN-93	18-JUN-93	6.3	UGG
	BNA'S IN SOIL BY GC/MS	330CBD	EATA		21-JUN-93	24-JUN-93	6.3	UGG
	BNA'S IN SOIL BY GC/MS	3NANIL	EAPA		15-JUN-93	18-JUN-93	.45	UGG
	BNA'S IN SOIL BY GC/MS	3NANIL	EATA		21-JUN-93	24-JUN-93	.45	UGG
	BNA'S IN SOIL BY GC/MS	460N2C	EAPA		15-JUN-93	18-JUN-93	.55	UGG
	BNA'S IN SOIL BY GC/MS	460N2C	EATA		21-JUN-93	24-JUN-93	.55	UGG
	BNA'S IN SOIL BY GC/MS	48RPPE	EAPA		15-JUN-93	18-JUN-93	.033	UGG
	BNA'S IN SOIL BY GC/MS	48RPPE	EATA		21-JUN-93	24-JUN-93	.033	UGG
	BNA'S IN SOIL BY GC/MS	4CANIL	EAPA		15-JUN-93	18-JUN-93	.81	UGG
	BNA'S IN SOIL BY GC/MS	4CANIL	EATA		21-JUN-93	24-JUN-93	.81	UGG
	BNA'S IN SOIL BY GC/MS	4CL3C	EAPA		15-JUN-93	18-JUN-93	.095	UGG
	BNA'S IN SOIL BY GC/MS	4CL3C	EATA		21-JUN-93	24-JUN-93	.095	UGG
	BNA'S IN SOIL BY GC/MS	4CLPPE	EAPA		15-JUN-93	18-JUN-93	.033	UGG
	BNA'S IN SOIL BY GC/MS	4CLPPE	EATA		21-JUN-93	24-JUN-93	.033	UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHANA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value Units
BNA'S IN SOIL BY GC/MS	LM18	4MP	EAPA		15-JUN-93	18-JUN-93	.24 UGG
BNA'S IN SOIL BY GC/MS		4MP	EATA		21-JUN-93	24-JUN-93	.24 UGG
BNA'S IN SOIL BY GC/MS		4NANIL	EAPA		15-JUN-93	18-JUN-93	.41 UGG
BNA'S IN SOIL BY GC/MS		4NANIL	EATA		21-JUN-93	24-JUN-93	.41 UGG
BNA'S IN SOIL BY GC/MS		4NP	EAPA		15-JUN-93	18-JUN-93	1.4 UGG
BNA'S IN SOIL BY GC/MS		4NP	EATA		21-JUN-93	24-JUN-93	1.4 UGG
BNA'S IN SOIL BY GC/MS		ABHC	EAPA		15-JUN-93	18-JUN-93	.27 UGG
BNA'S IN SOIL BY GC/MS		ABHC	EATA		21-JUN-93	24-JUN-93	.27 UGG
BNA'S IN SOIL BY GC/MS		ACLDAN	EAPA		15-JUN-93	18-JUN-93	.33 UGG
BNA'S IN SOIL BY GC/MS		ACLDAN	EATA		21-JUN-93	24-JUN-93	.33 UGG
BNA'S IN SOIL BY GC/MS		AENSLF	EAPA		15-JUN-93	18-JUN-93	.62 UGG
BNA'S IN SOIL BY GC/MS		AENSLF	EATA		21-JUN-93	24-JUN-93	.62 UGG
BNA'S IN SOIL BY GC/MS		ALDRN	EAPA		15-JUN-93	18-JUN-93	.33 UGG
BNA'S IN SOIL BY GC/MS		ALDRN	EATA		21-JUN-93	24-JUN-93	.33 UGG
BNA'S IN SOIL BY GC/MS		ANAPNE	EAPA		15-JUN-93	18-JUN-93	.036 UGG
BNA'S IN SOIL BY GC/MS		ANAPNE	EATA		21-JUN-93	24-JUN-93	.036 UGG
BNA'S IN SOIL BY GC/MS		ANAPYL	EAPA		15-JUN-93	18-JUN-93	.033 UGG
BNA'S IN SOIL BY GC/MS		ANAPYL	EATA		21-JUN-93	24-JUN-93	.033 UGG
BNA'S IN SOIL BY GC/MS		ANTRC	EAPA		15-JUN-93	18-JUN-93	.033 UGG
BNA'S IN SOIL BY GC/MS		ANTRC	EATA		21-JUN-93	24-JUN-93	.033 UGG
BNA'S IN SOIL BY GC/MS		B2CEXM	EAPA		15-JUN-93	18-JUN-93	.059 UGG
BNA'S IN SOIL BY GC/MS		B2CEXM	EATA		21-JUN-93	24-JUN-93	.059 UGG
BNA'S IN SOIL BY GC/MS		B2CIPE	EAPA		15-JUN-93	18-JUN-93	.2 UGG
BNA'S IN SOIL BY GC/MS		B2CIPE	EATA		21-JUN-93	24-JUN-93	.2 UGG
BNA'S IN SOIL BY GC/MS		B2CLEE	EAPA		15-JUN-93	18-JUN-93	.033 UGG
BNA'S IN SOIL BY GC/MS		B2CLEE	EATA		21-JUN-93	24-JUN-93	.033 UGG
BNA'S IN SOIL BY GC/MS		B2EHP	EAPA		15-JUN-93	18-JUN-93	.62 UGG
BNA'S IN SOIL BY GC/MS		B2EHP	EATA		21-JUN-93	24-JUN-93	.62 UGG
BNA'S IN SOIL BY GC/MS		BAANTR	EAPA		15-JUN-93	18-JUN-93	.17 UGG
BNA'S IN SOIL BY GC/MS		BAANTR	EATA		21-JUN-93	24-JUN-93	.17 UGG
BNA'S IN SOIL BY GC/MS		BAPYR	EAPA		15-JUN-93	18-JUN-93	.25 UGG
BNA'S IN SOIL BY GC/MS		BAPYR	EATA		21-JUN-93	24-JUN-93	.25 UGG
BNA'S IN SOIL BY GC/MS		BBFANT	EAPA		15-JUN-93	18-JUN-93	.21 UGG
BNA'S IN SOIL BY GC/MS		BBFANT	EATA		21-JUN-93	24-JUN-93	.21 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
METHOD BLANKS

USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
LM18	BNA'S IN SOIL BY GC/MS	EAPA		15-JUN-93	18-JUN-93	.27	UGG
	BNA'S IN SOIL BY GC/MS	BBHC		21-JUN-93	24-JUN-93	.27	UGG
	BNA'S IN SOIL BY GC/MS	BBHP		15-JUN-93	18-JUN-93	.17	UGG
	BNA'S IN SOIL BY GC/MS	BBZP		21-JUN-93	24-JUN-93	.17	UGG
	BNA'S IN SOIL BY GC/MS	BENSLF		15-JUN-93	18-JUN-93	.62	UGG
	BNA'S IN SOIL BY GC/MS	BENSLF		21-JUN-93	24-JUN-93	.62	UGG
	BNA'S IN SOIL BY GC/MS	BENZID		15-JUN-93	18-JUN-93	.85	UGG
	BNA'S IN SOIL BY GC/MS	BENZID		21-JUN-93	24-JUN-93	.85	UGG
	BNA'S IN SOIL BY GC/MS	BENZOA		15-JUN-93	18-JUN-93	6.1	UGG
	BNA'S IN SOIL BY GC/MS	BENZOA		21-JUN-93	24-JUN-93	6.1	UGG
	BNA'S IN SOIL BY GC/MS	BGHIPY		15-JUN-93	18-JUN-93	.25	UGG
	BNA'S IN SOIL BY GC/MS	BGHIPY		21-JUN-93	24-JUN-93	.25	UGG
	BNA'S IN SOIL BY GC/MS	BKFANT		15-JUN-93	18-JUN-93	.066	UGG
	BNA'S IN SOIL BY GC/MS	BKFANT		21-JUN-93	24-JUN-93	.066	UGG
	BNA'S IN SOIL BY GC/MS	BZALC		15-JUN-93	18-JUN-93	.19	UGG
	BNA'S IN SOIL BY GC/MS	BZALC		21-JUN-93	24-JUN-93	.19	UGG
	BNA'S IN SOIL BY GC/MS	CARBZ		15-JUN-93	18-JUN-93	.1	UGG
	BNA'S IN SOIL BY GC/MS	CARBZ		21-JUN-93	24-JUN-93	.12	UGG
	BNA'S IN SOIL BY GC/MS	CHRY		15-JUN-93	18-JUN-93	.033	UGG
	BNA'S IN SOIL BY GC/MS	CHRY		21-JUN-93	24-JUN-93	.033	UGG
	BNA'S IN SOIL BY GC/MS	CL6BZ		15-JUN-93	18-JUN-93	.033	UGG
	BNA'S IN SOIL BY GC/MS	CL6BZ		21-JUN-93	24-JUN-93	.033	UGG
	BNA'S IN SOIL BY GC/MS	CL6CP		15-JUN-93	18-JUN-93	6.2	UGG
	BNA'S IN SOIL BY GC/MS	CL6CP		21-JUN-93	24-JUN-93	6.2	UGG
	BNA'S IN SOIL BY GC/MS	CL6ET		15-JUN-93	18-JUN-93	.15	UGG
	BNA'S IN SOIL BY GC/MS	CL6ET		21-JUN-93	24-JUN-93	.15	UGG
	BNA'S IN SOIL BY GC/MS	DBAHA		15-JUN-93	18-JUN-93	.21	UGG
	BNA'S IN SOIL BY GC/MS	DBAHA		21-JUN-93	24-JUN-93	.21	UGG
	BNA'S IN SOIL BY GC/MS	DBHC		15-JUN-93	18-JUN-93	.27	UGG
	BNA'S IN SOIL BY GC/MS	DBHC		21-JUN-93	24-JUN-93	.27	UGG
	BNA'S IN SOIL BY GC/MS	DBZFUR		15-JUN-93	18-JUN-93	.035	UGG
	BNA'S IN SOIL BY GC/MS	DBZFUR		21-JUN-93	24-JUN-93	.035	UGG
	BNA'S IN SOIL BY GC/MS	DEP		15-JUN-93	18-JUN-93	.24	UGG
	BNA'S IN SOIL BY GC/MS	DEP		21-JUN-93	24-JUN-93	.27	UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAWA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
BNAS IN SOIL BY GC/MS	LM18	DLDRN	EAPA		15-JUN-93	18-JUN-93	<	.31 UGG
BNAS IN SOIL BY GC/MS		DLDRN	EATA		21-JUN-93	24-JUN-93	<	.31 UGG
BNAS IN SOIL BY GC/MS		DMP	EAPA		15-JUN-93	18-JUN-93	<	.17 UGG
BNAS IN SOIL BY GC/MS		DMP	EATA		21-JUN-93	24-JUN-93	<	.17 UGG
BNAS IN SOIL BY GC/MS		DNBP	EAPA		15-JUN-93	18-JUN-93	<	.061 UGG
BNAS IN SOIL BY GC/MS		DNBP	EATA		21-JUN-93	24-JUN-93	<	.061 UGG
BNAS IN SOIL BY GC/MS		DNOP	EAPA		15-JUN-93	18-JUN-93	<	.19 UGG
BNAS IN SOIL BY GC/MS		DNOP	EATA		21-JUN-93	24-JUN-93	<	.19 UGG
BNAS IN SOIL BY GC/MS		ENDRN	EAPA		15-JUN-93	18-JUN-93	<	.45 UGG
BNAS IN SOIL BY GC/MS		ENDRN	EATA		21-JUN-93	24-JUN-93	<	.45 UGG
BNAS IN SOIL BY GC/MS		ENDRNA	EAPA		15-JUN-93	18-JUN-93	<	.53 UGG
BNAS IN SOIL BY GC/MS		ENDRNA	EATA		21-JUN-93	24-JUN-93	<	.53 UGG
BNAS IN SOIL BY GC/MS		ENDRNK	EAPA		15-JUN-93	18-JUN-93	<	.53 UGG
BNAS IN SOIL BY GC/MS		ENDRNK	EATA		21-JUN-93	24-JUN-93	<	.53 UGG
BNAS IN SOIL BY GC/MS		ESFS04	EAPA		15-JUN-93	18-JUN-93	<	.62 UGG
BNAS IN SOIL BY GC/MS		ESFS04	EATA		21-JUN-93	24-JUN-93	<	.62 UGG
BNAS IN SOIL BY GC/MS		FANT	EAPA		15-JUN-93	18-JUN-93	<	.068 UGG
BNAS IN SOIL BY GC/MS		FANT	EATA		21-JUN-93	24-JUN-93	<	.068 UGG
BNAS IN SOIL BY GC/MS		FLRENE	EAPA		15-JUN-93	18-JUN-93	<	.033 UGG
BNAS IN SOIL BY GC/MS		FLRENE	EATA		21-JUN-93	24-JUN-93	<	.033 UGG
BNAS IN SOIL BY GC/MS		GCLDAN	EAPA		15-JUN-93	18-JUN-93	<	.33 UGG
BNAS IN SOIL BY GC/MS		GCLDAN	EATA		21-JUN-93	24-JUN-93	<	.33 UGG
BNAS IN SOIL BY GC/MS		HCB	EAPA		15-JUN-93	18-JUN-93	<	.23 UGG
BNAS IN SOIL BY GC/MS		HCB	EATA		21-JUN-93	24-JUN-93	<	.23 UGG
BNAS IN SOIL BY GC/MS		HPCL	EAPA		15-JUN-93	18-JUN-93	<	.13 UGG
BNAS IN SOIL BY GC/MS		HPCL	EATA		21-JUN-93	24-JUN-93	<	.13 UGG
BNAS IN SOIL BY GC/MS		HPCL	EAPA		15-JUN-93	18-JUN-93	<	.33 UGG
BNAS IN SOIL BY GC/MS		HPCL	EATA		21-JUN-93	24-JUN-93	<	.33 UGG
BNAS IN SOIL BY GC/MS		ICOPYR	EAPA		15-JUN-93	18-JUN-93	<	.29 UGG
BNAS IN SOIL BY GC/MS		ICOPYR	EATA		21-JUN-93	24-JUN-93	<	.29 UGG
BNAS IN SOIL BY GC/MS		ISOPHR	EAPA		15-JUN-93	18-JUN-93	<	.033 UGG
BNAS IN SOIL BY GC/MS		ISOPHR	EATA		21-JUN-93	24-JUN-93	<	.033 UGG
BNAS IN SOIL BY GC/MS		LIN	EAPA		15-JUN-93	18-JUN-93	<	.27 UGG
BNAS IN SOIL BY GC/MS		LIN	EATA		21-JUN-93	24-JUN-93	<	.27 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
LM18	MEXCLR	EAPA		15-JUN-93	18-JUN-93	.33	UGG
BNA'S IN SOIL BY GC/MS	MEXCLR	EATA		21-JUN-93	24-JUN-93	.33	UGG
BNA'S IN SOIL BY GC/MS	NAP	EAPA		15-JUN-93	18-JUN-93	.037	UGG
BNA'S IN SOIL BY GC/MS	NAP	EATA		21-JUN-93	24-JUN-93	.037	UGG
BNA'S IN SOIL BY GC/MS	NB	EAPA		15-JUN-93	18-JUN-93	.045	UGG
BNA'S IN SOIL BY GC/MS	NB	EATA		21-JUN-93	24-JUN-93	.045	UGG
BNA'S IN SOIL BY GC/MS	NDME	EAPA		15-JUN-93	18-JUN-93	.14	UGG
BNA'S IN SOIL BY GC/MS	NDME	EATA		21-JUN-93	24-JUN-93	.14	UGG
BNA'S IN SOIL BY GC/MS	NDMPA	EAPA		15-JUN-93	18-JUN-93	.2	UGG
BNA'S IN SOIL BY GC/MS	NDMPA	EATA		21-JUN-93	24-JUN-93	.2	UGG
BNA'S IN SOIL BY GC/MS	NDMPA	EAPA		15-JUN-93	18-JUN-93	.19	UGG
BNA'S IN SOIL BY GC/MS	NDPA	EATA		21-JUN-93	24-JUN-93	.19	UGG
BNA'S IN SOIL BY GC/MS	PCB016	EAPA		15-JUN-93	18-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB016	EATA		21-JUN-93	24-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB221	EAPA		15-JUN-93	18-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB221	EATA		21-JUN-93	24-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB232	EAPA		15-JUN-93	18-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB232	EATA		21-JUN-93	24-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB242	EAPA		15-JUN-93	18-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB242	EATA		21-JUN-93	24-JUN-93	1.4	UGG
BNA'S IN SOIL BY GC/MS	PCB248	EAPA		15-JUN-93	18-JUN-93	2	UGG
BNA'S IN SOIL BY GC/MS	PCB248	EATA		21-JUN-93	24-JUN-93	2	UGG
BNA'S IN SOIL BY GC/MS	PCB254	EAPA		15-JUN-93	18-JUN-93	2.3	UGG
BNA'S IN SOIL BY GC/MS	PCB254	EATA		21-JUN-93	24-JUN-93	2.3	UGG
BNA'S IN SOIL BY GC/MS	PCB260	EAPA		15-JUN-93	18-JUN-93	2.6	UGG
BNA'S IN SOIL BY GC/MS	PCB260	EATA		21-JUN-93	24-JUN-93	2.6	UGG
BNA'S IN SOIL BY GC/MS	PCP	EAPA		15-JUN-93	18-JUN-93	1.3	UGG
BNA'S IN SOIL BY GC/MS	PCP	EATA		21-JUN-93	24-JUN-93	1.3	UGG
BNA'S IN SOIL BY GC/MS	PHANTR	EAPA		15-JUN-93	18-JUN-93	.033	UGG
BNA'S IN SOIL BY GC/MS	PHANTR	EATA		21-JUN-93	24-JUN-93	.033	UGG
BNA'S IN SOIL BY GC/MS	PHENOL	EAPA		15-JUN-93	18-JUN-93	.11	UGG
BNA'S IN SOIL BY GC/MS	PHENOL	EATA		21-JUN-93	24-JUN-93	.11	UGG
BNA'S IN SOIL BY GC/MS	PPDD	EAPA		15-JUN-93	18-JUN-93	.27	UGG
BNA'S IN SOIL BY GC/MS	PPDD	EATA		21-JUN-93	24-JUN-93	.27	UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

USATHAMA Method Code	Method Description	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
LM18	BNA'S IN SOIL BY GC/MS	PPDE	EAPA		15-JUN-93	18-JUN-93	<	.31 UGG
	BNA'S IN SOIL BY GC/MS	PPDE	EATA		21-JUN-93	24-JUN-93	<	.31 UGG
	BNA'S IN SOIL BY GC/MS	PPDT	EAPA		15-JUN-93	18-JUN-93	<	.31 UGG
	BNA'S IN SOIL BY GC/MS	PPDT	EATA		21-JUN-93	24-JUN-93	<	.31 UGG
	BNA'S IN SOIL BY GC/MS	PYR	EAPA		15-JUN-93	18-JUN-93	<	.033 UGG
	BNA'S IN SOIL BY GC/MS	PYR	EATA		21-JUN-93	24-JUN-93	<	.033 UGG
	BNA'S IN SOIL BY GC/MS	TPHEN	EAPA		15-JUN-93	18-JUN-93	<	2.6 UGG
	BNA'S IN SOIL BY GC/MS	TPHEN	EATA		21-JUN-93	24-JUN-93	<	2.6 UGG
LM19	VOC'S IN SOIL BY GC/MS	111TCE	EMJA		10-JUN-93	10-JUN-93	<	.004 UGG
	VOC'S IN SOIL BY GC/MS	111TCE	EMKA		11-JUN-93	11-JUN-93	<	.004 UGG
	VOC'S IN SOIL BY GC/MS	111TCE	EMMA		15-JUN-93	15-JUN-93	<	.004 UGG
	VOC'S IN SOIL BY GC/MS	111TCE	EMNA		15-JUN-93	15-JUN-93	<	.2 UGG
	VOC'S IN SOIL BY GC/MS	111TCE	EMOA		16-JUN-93	16-JUN-93	<	.2 UGG
	VOC'S IN SOIL BY GC/MS	111TCE	YGTB		23-AUG-94	23-AUG-94	<	.0044 UGG
	VOC'S IN SOIL BY GC/MS	111TCE	YGNB		27-AUG-94	27-AUG-94	<	.0044 UGG
	VOC'S IN SOIL BY GC/MS	112TCE	EMJA		10-JUN-93	10-JUN-93	<	.005 UGG
	VOC'S IN SOIL BY GC/MS	112TCE	EMKA		11-JUN-93	11-JUN-93	<	.005 UGG
	VOC'S IN SOIL BY GC/MS	112TCE	EMMA		15-JUN-93	15-JUN-93	<	.005 UGG
	VOC'S IN SOIL BY GC/MS	112TCE	EMNA		15-JUN-93	15-JUN-93	<	.3 UGG
	VOC'S IN SOIL BY GC/MS	112TCE	EMOA		16-JUN-93	16-JUN-93	<	.3 UGG
	VOC'S IN SOIL BY GC/MS	112TCE	YGTB		23-AUG-94	23-AUG-94	<	.0054 UGG
	VOC'S IN SOIL BY GC/MS	112TCE	YGNB		27-AUG-94	27-AUG-94	<	.0054 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMJA		10-JUN-93	10-JUN-93	<	.004 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMKA		11-JUN-93	11-JUN-93	<	.004 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMMA		15-JUN-93	15-JUN-93	<	.004 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMNA		15-JUN-93	15-JUN-93	<	.2 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMOA		16-JUN-93	16-JUN-93	<	.2 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	YGTB		23-AUG-94	23-AUG-94	<	.0039 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	YGNB		27-AUG-94	27-AUG-94	<	.0039 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMJA		10-JUN-93	10-JUN-93	<	.002 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMKA		11-JUN-93	11-JUN-93	<	.002 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMMA		15-JUN-93	15-JUN-93	<	.002 UGG
	VOC'S IN SOIL BY GC/MS	11DCE	EMNA		15-JUN-93	15-JUN-93	<	.1 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
VOC'S IN SOIL BY GC/MS	LM19	11DCLE	EMDA		16-JUN-93	16-JUN-93	<	UGG
VOC'S IN SOIL BY GC/MS		11DCLE	YGTB		23-AUG-94	23-AUG-94	<	.0023 UGG
VOC'S IN SOIL BY GC/MS		11DCLE	YGTB		27-AUG-94	27-AUG-94	<	.0023 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		10-JUN-93	10-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		11-JUN-93	11-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		15-JUN-93	15-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		15-JUN-93	15-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		16-JUN-93	16-JUN-93	<	.2 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMDA		23-AUG-94	23-AUG-94	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCE	YGTB		27-AUG-94	27-AUG-94	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCE	YGTB		27-AUG-94	27-AUG-94	<	.002 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		11-JUN-93	11-JUN-93	<	.002 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		15-JUN-93	15-JUN-93	<	.002 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMJA		15-JUN-93	15-JUN-93	<	.07 UGG
VOC'S IN SOIL BY GC/MS		12DCE	EMDA		16-JUN-93	16-JUN-93	<	.07 UGG
VOC'S IN SOIL BY GC/MS		12DCE	YGTB		23-AUG-94	23-AUG-94	<	.0017 UGG
VOC'S IN SOIL BY GC/MS		12DCE	YGTB		27-AUG-94	27-AUG-94	<	.0017 UGG
VOC'S IN SOIL BY GC/MS		12DCLP	EMJA		10-JUN-93	10-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCLP	EMJA		11-JUN-93	11-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCLP	EMJA		15-JUN-93	15-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		12DCLP	EMJA		15-JUN-93	15-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		12DCLP	EMDA		16-JUN-93	16-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		12DCLP	YGTB		23-AUG-94	23-AUG-94	<	.0029 UGG
VOC'S IN SOIL BY GC/MS		12DCLP	YGTB		27-AUG-94	27-AUG-94	<	.0029 UGG
VOC'S IN SOIL BY GC/MS		2CLEVE	EMJA		10-JUN-93	10-JUN-93	<	.01 UGG
VOC'S IN SOIL BY GC/MS		2CLEVE	EMJA		11-JUN-93	11-JUN-93	<	.01 UGG
VOC'S IN SOIL BY GC/MS		2CLEVE	EMJA		15-JUN-93	15-JUN-93	<	.01 UGG
VOC'S IN SOIL BY GC/MS		2CLEVE	EMJA		15-JUN-93	15-JUN-93	<	.5 UGG
VOC'S IN SOIL BY GC/MS		2CLEVE	EMDA		16-JUN-93	16-JUN-93	<	.5 UGG
VOC'S IN SOIL BY GC/MS		2CLEVE	YGTB		23-AUG-94	23-AUG-94	<	.01 UGG
VOC'S IN SOIL BY GC/MS		2CLEVE	YGTB		27-AUG-94	27-AUG-94	<	.01 UGG
VOC'S IN SOIL BY GC/MS		ACET	EMJA		10-JUN-93	10-JUN-93	<	.017 UGG
VOC'S IN SOIL BY GC/MS		ACET	EMJA		11-JUN-93	11-JUN-93	<	.017 UGG
VOC'S IN SOIL BY GC/MS		ACET	EMJA		15-JUN-93	15-JUN-93	<	.017 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
VOC'S IN SOIL BY GC/MS	LM19	ACET	EMNA		15-JUN-93	15-JUN-93	<	.8 UGG
VOC'S IN SOIL BY GC/MS		ACET	EMOA		16-JUN-93	16-JUN-93	<	.8 UGG
VOC'S IN SOIL BY GC/MS		ACET	YGTB		23-AUG-94	23-AUG-94	<	.017 UGG
VOC'S IN SOIL BY GC/MS		ACET	YGTB		27-AUG-94	27-AUG-94	<	.017 UGG
VOC'S IN SOIL BY GC/MS		ACROLN	EMJA		10-JUN-93	10-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACROLN	EMJA		11-JUN-93	11-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACROLN	EMMA		15-JUN-93	15-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACROLN	EMMA		15-JUN-93	15-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACROLN	EMOA		16-JUN-93	16-JUN-93	<	5 UGG
VOC'S IN SOIL BY GC/MS		ACROLN	YGTB		23-AUG-94	23-AUG-94	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACROLN	YGTB		27-AUG-94	27-AUG-94	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACRYLO	EMJA		10-JUN-93	10-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACRYLO	EMMA		11-JUN-93	11-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACRYLO	EMMA		15-JUN-93	15-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACRYLO	EMMA		15-JUN-93	15-JUN-93	<	5 UGG
VOC'S IN SOIL BY GC/MS		ACRYLO	EMOA		16-JUN-93	16-JUN-93	<	5 UGG
VOC'S IN SOIL BY GC/MS		ACRYLO	YGTB		23-AUG-94	23-AUG-94	<	.1 UGG
VOC'S IN SOIL BY GC/MS		ACRYLO	YGTB		27-AUG-94	27-AUG-94	<	.1 UGG
VOC'S IN SOIL BY GC/MS		BRDCLM	EMJA		10-JUN-93	10-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		BRDCLM	EMKA		11-JUN-93	11-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		BRDCLM	EMMA		15-JUN-93	15-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		BRDCLM	EMMA		15-JUN-93	15-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		BRDCLM	EMOA		16-JUN-93	16-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		BRDCLM	YGTB		23-AUG-94	23-AUG-94	<	.0029 UGG
VOC'S IN SOIL BY GC/MS		BRDCLM	YGTB		27-AUG-94	27-AUG-94	<	.0029 UGG
VOC'S IN SOIL BY GC/MS		C13DCP	EMJA		10-JUN-93	10-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		C13DCP	EMKA		11-JUN-93	11-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		C13DCP	EMMA		15-JUN-93	15-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		C13DCP	EMMA		15-JUN-93	15-JUN-93	<	.2 UGG
VOC'S IN SOIL BY GC/MS		C13DCP	EMOA		16-JUN-93	16-JUN-93	<	.2 UGG
VOC'S IN SOIL BY GC/MS		C13DCP	YGTB		23-AUG-94	23-AUG-94	<	.0032 UGG
VOC'S IN SOIL BY GC/MS		C13DCP	YGTB		27-AUG-94	27-AUG-94	<	.0032 UGG
VOC'S IN SOIL BY GC/MS		C2AVE	EMJA		10-JUN-93	10-JUN-93	<	.032 UGG
VOC'S IN SOIL BY GC/MS		C2AVE	EMKA		11-JUN-93	11-JUN-93	<	.032 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

USATHAMA		Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
		LM19	C2AVE	EMMA		15-JUN-93	15-JUN-93	.032	UGG
VOC'S IN SOIL BY GC/MS			C2AVE	EMMA		15-JUN-93	15-JUN-93	2	UGG
VOC'S IN SOIL BY GC/MS			C2AVE	EMMA		16-JUN-93	16-JUN-93	2	UGG
VOC'S IN SOIL BY GC/MS			C2AVE	YGTB		23-AUG-94	23-AUG-94	.032	UGG
VOC'S IN SOIL BY GC/MS			C2AVE	YGTB		27-AUG-94	27-AUG-94	.032	UGG
VOC'S IN SOIL BY GC/MS			C2H3CL	EMJA		10-JUN-93	10-JUN-93	.006	UGG
VOC'S IN SOIL BY GC/MS			C2H3CL	EMKA		11-JUN-93	11-JUN-93	.006	UGG
VOC'S IN SOIL BY GC/MS			C2H3CL	EMKA		15-JUN-93	15-JUN-93	.006	UGG
VOC'S IN SOIL BY GC/MS			C2H3CL	EMNA		15-JUN-93	15-JUN-93	.3	UGG
VOC'S IN SOIL BY GC/MS			C2H3CL	EMNA		16-JUN-93	16-JUN-93	.0062	UGG
VOC'S IN SOIL BY GC/MS			C2H3CL	YGTB		23-AUG-94	23-AUG-94	.0062	UGG
VOC'S IN SOIL BY GC/MS			C2H3CL	YGTB		27-AUG-94	27-AUG-94	.012	UGG
VOC'S IN SOIL BY GC/MS			C2H5CL	EMJA		10-JUN-93	10-JUN-93	.012	UGG
VOC'S IN SOIL BY GC/MS			C2H5CL	EMKA		11-JUN-93	11-JUN-93	.012	UGG
VOC'S IN SOIL BY GC/MS			C2H5CL	EMNA		15-JUN-93	15-JUN-93	.012	UGG
VOC'S IN SOIL BY GC/MS			C2H5CL	EMNA		15-JUN-93	15-JUN-93	.6	UGG
VOC'S IN SOIL BY GC/MS			C2H5CL	EMNA		16-JUN-93	16-JUN-93	.6	UGG
VOC'S IN SOIL BY GC/MS			C2H5CL	YGTB		23-AUG-94	23-AUG-94	.012	UGG
VOC'S IN SOIL BY GC/MS			C2H5CL	YGTB		27-AUG-94	27-AUG-94	.012	UGG
VOC'S IN SOIL BY GC/MS			C6H6	EMJA		10-JUN-93	10-JUN-93	.002	UGG
VOC'S IN SOIL BY GC/MS			C6H6	EMKA		11-JUN-93	11-JUN-93	.002	UGG
VOC'S IN SOIL BY GC/MS			C6H6	EMNA		15-JUN-93	15-JUN-93	.002	UGG
VOC'S IN SOIL BY GC/MS			C6H6	EMNA		15-JUN-93	15-JUN-93	.08	UGG
VOC'S IN SOIL BY GC/MS			C6H6	YGTB		16-JUN-93	16-JUN-93	.08	UGG
VOC'S IN SOIL BY GC/MS			C6H6	YGTB		23-AUG-94	23-AUG-94	.0015	UGG
VOC'S IN SOIL BY GC/MS			C6H6	YGTB		27-AUG-94	27-AUG-94	.0015	UGG
VOC'S IN SOIL BY GC/MS			CCL3F	EMJA		10-JUN-93	10-JUN-93	.006	UGG
VOC'S IN SOIL BY GC/MS			CCL3F	EMKA		11-JUN-93	11-JUN-93	.006	UGG
VOC'S IN SOIL BY GC/MS			CCL3F	EMNA		15-JUN-93	15-JUN-93	.006	UGG
VOC'S IN SOIL BY GC/MS			CCL3F	EMNA		15-JUN-93	15-JUN-93	.3	UGG
VOC'S IN SOIL BY GC/MS			CCL3F	EMNA		16-JUN-93	16-JUN-93	.3	UGG
VOC'S IN SOIL BY GC/MS			CCL3F	YGTB		23-AUG-94	23-AUG-94	.017	UGG
VOC'S IN SOIL BY GC/MS			CCL3F	YGTB		27-AUG-94	27-AUG-94	.03	UGG
VOC'S IN SOIL BY GC/MS			CCL4	EMJA		10-JUN-93	10-JUN-93	.007	UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
VOC'S IN SOIL BY GC/MS	LM19	CCL4	EMKA		11-JUN-93	11-JUN-93	<	.007 UGG
VOC'S IN SOIL BY GC/MS		CCL4	EMMA		15-JUN-93	15-JUN-93	<	.007 UGG
VOC'S IN SOIL BY GC/MS		CCL4	EMMA		15-JUN-93	15-JUN-93	<	.4 UGG
VOC'S IN SOIL BY GC/MS		CCL4	EMOA		16-JUN-93	16-JUN-93	<	.4 UGG
VOC'S IN SOIL BY GC/MS		CCL4	EMOA		23-AUG-94	23-AUG-94	<	.007 UGG
VOC'S IN SOIL BY GC/MS		CCL4	YGTB		27-AUG-94	27-AUG-94	<	.007 UGG
VOC'S IN SOIL BY GC/MS		CH2CL2	EMJA		10-JUN-93	10-JUN-93	<	.012 UGG
VOC'S IN SOIL BY GC/MS		CH2CL2	EMKA		11-JUN-93	11-JUN-93	<	.012 UGG
VOC'S IN SOIL BY GC/MS		CH2CL2	EMMA		15-JUN-93	15-JUN-93	<	.012 UGG
VOC'S IN SOIL BY GC/MS		CH2CL2	EMMA		15-JUN-93	15-JUN-93	<	.6 UGG
VOC'S IN SOIL BY GC/MS		CH2CL2	EMOA		16-JUN-93	16-JUN-93	<	.6 UGG
VOC'S IN SOIL BY GC/MS		CH2CL2	YGTB		23-AUG-94	23-AUG-94	<	.012 UGG
VOC'S IN SOIL BY GC/MS		CH2CL2	YGTB		27-AUG-94	27-AUG-94	<	.012 UGG
VOC'S IN SOIL BY GC/MS		CH3BR	EMJA		10-JUN-93	10-JUN-93	<	.006 UGG
VOC'S IN SOIL BY GC/MS		CH3BR	EMKA		11-JUN-93	11-JUN-93	<	.006 UGG
VOC'S IN SOIL BY GC/MS		CH3BR	EMMA		15-JUN-93	15-JUN-93	<	.006 UGG
VOC'S IN SOIL BY GC/MS		CH3BR	EMMA		15-JUN-93	15-JUN-93	<	.3 UGG
VOC'S IN SOIL BY GC/MS		CH3BR	EMOA		16-JUN-93	16-JUN-93	<	.3 UGG
VOC'S IN SOIL BY GC/MS		CH3BR	YGTB		23-AUG-94	23-AUG-94	<	.0057 UGG
VOC'S IN SOIL BY GC/MS		CH3BR	YGTB		27-AUG-94	27-AUG-94	<	.0057 UGG
VOC'S IN SOIL BY GC/MS		CH3CL	EMJA		10-JUN-93	10-JUN-93	<	.009 UGG
VOC'S IN SOIL BY GC/MS		CH3CL	EMKA		11-JUN-93	11-JUN-93	<	.009 UGG
VOC'S IN SOIL BY GC/MS		CH3CL	EMMA		15-JUN-93	15-JUN-93	<	.009 UGG
VOC'S IN SOIL BY GC/MS		CH3CL	EMMA		15-JUN-93	15-JUN-93	<	.4 UGG
VOC'S IN SOIL BY GC/MS		CH3CL	EMOA		16-JUN-93	16-JUN-93	<	.4 UGG
VOC'S IN SOIL BY GC/MS		CH3CL	YGTB		23-AUG-94	23-AUG-94	<	.0088 UGG
VOC'S IN SOIL BY GC/MS		CH3CL	YGTB		27-AUG-94	27-AUG-94	<	.0088 UGG
VOC'S IN SOIL BY GC/MS		CHBR3	EMJA		10-JUN-93	10-JUN-93	<	.007 UGG
VOC'S IN SOIL BY GC/MS		CHBR3	EMKA		11-JUN-93	11-JUN-93	<	.007 UGG
VOC'S IN SOIL BY GC/MS		CHBR3	EMMA		15-JUN-93	15-JUN-93	<	.007 UGG
VOC'S IN SOIL BY GC/MS		CHBR3	EMMA		15-JUN-93	15-JUN-93	<	.3 UGG
VOC'S IN SOIL BY GC/MS		CHBR3	EMOA		16-JUN-93	16-JUN-93	<	.3 UGG
VOC'S IN SOIL BY GC/MS		CHBR3	YGTB		23-AUG-94	23-AUG-94	<	.0069 UGG
VOC'S IN SOIL BY GC/MS		CHBR3	YGTB		27-AUG-94	27-AUG-94	<	.0069 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	ENJA		10-JUN-93	10-JUN-93	<	.001 UGG
VOC'S IN SOIL BY GC/MS		CHCL3	ENKA		11-JUN-93	11-JUN-93	<	.001 UGG
VOC'S IN SOIL BY GC/MS		CHCL3	ENMA		15-JUN-93	15-JUN-93	<	.001 UGG
VOC'S IN SOIL BY GC/MS		CHCL3	ENMA		15-JUN-93	15-JUN-93	<	.04 UGG
VOC'S IN SOIL BY GC/MS		CHCL3	ENMA		16-JUN-93	16-JUN-93	<	.04 UGG
VOC'S IN SOIL BY GC/MS		CHCL3	YGTB		23-AUG-94	23-AUG-94	<	.00087 UGG
VOC'S IN SOIL BY GC/MS		CHCL3	YGTB		27-AUG-94	27-AUG-94	<	.00087 UGG
VOC'S IN SOIL BY GC/MS		CL2BZ	ENJA		10-JUN-93	10-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		CL2BZ	ENKA		11-JUN-93	11-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		CL2BZ	ENMA		15-JUN-93	15-JUN-93	<	.1 UGG
VOC'S IN SOIL BY GC/MS		CL2BZ	ENMA		15-JUN-93	15-JUN-93	<	5 UGG
VOC'S IN SOIL BY GC/MS		CL2BZ	ENMA		16-JUN-93	16-JUN-93	<	5 UGG
VOC'S IN SOIL BY GC/MS		CL2BZ	YGTB		23-AUG-94	23-AUG-94	<	.1 UGG
VOC'S IN SOIL BY GC/MS		CL2BZ	YGTB		27-AUG-94	27-AUG-94	<	.1 UGG
VOC'S IN SOIL BY GC/MS		CLC6H5	ENJA		10-JUN-93	10-JUN-93	<	.001 UGG
VOC'S IN SOIL BY GC/MS		CLC6H5	ENKA		11-JUN-93	11-JUN-93	<	.001 UGG
VOC'S IN SOIL BY GC/MS		CLC6H5	ENMA		15-JUN-93	15-JUN-93	<	.001 UGG
VOC'S IN SOIL BY GC/MS		CLC6H5	ENMA		15-JUN-93	15-JUN-93	<	.04 UGG
VOC'S IN SOIL BY GC/MS		CLC6H5	ENMA		16-JUN-93	16-JUN-93	<	.04 UGG
VOC'S IN SOIL BY GC/MS		CLC6H5	YGTB		23-AUG-94	23-AUG-94	<	.00086 UGG
VOC'S IN SOIL BY GC/MS		CLC6H5	YGTB		27-AUG-94	27-AUG-94	<	.00086 UGG
VOC'S IN SOIL BY GC/MS		CS2	ENJA		10-JUN-93	10-JUN-93	<	.004 UGG
VOC'S IN SOIL BY GC/MS		CS2	ENKA		11-JUN-93	11-JUN-93	<	.004 UGG
VOC'S IN SOIL BY GC/MS		CS2	ENMA		15-JUN-93	15-JUN-93	<	.004 UGG
VOC'S IN SOIL BY GC/MS		CS2	ENMA		15-JUN-93	15-JUN-93	<	.2 UGG
VOC'S IN SOIL BY GC/MS		CS2	ENMA		16-JUN-93	16-JUN-93	<	.2 UGG
VOC'S IN SOIL BY GC/MS		CS2	YGTB		23-AUG-94	23-AUG-94	<	.0044 UGG
VOC'S IN SOIL BY GC/MS		CS2	YGTB		27-AUG-94	27-AUG-94	<	.0044 UGG
VOC'S IN SOIL BY GC/MS		DBRCLM	ENJA		10-JUN-93	10-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		DBRCLM	ENKA		11-JUN-93	11-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		DBRCLM	ENMA		15-JUN-93	15-JUN-93	<	.003 UGG
VOC'S IN SOIL BY GC/MS		DBRCLM	ENMA		15-JUN-93	15-JUN-93	<	.2 UGG
VOC'S IN SOIL BY GC/MS		DBRCLM	ENMA		16-JUN-93	16-JUN-93	<	.2 UGG
VOC'S IN SOIL BY GC/MS		DBRCLM	YGTB		23-AUG-94	23-AUG-94	<	.0031 UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
LM19	DBRCLM	YGBW		27-AUG-94	27-AUG-94	.0031	UGG
	ETC6H5	EMJA		10-JUN-93	10-JUN-93	.002	UGG
	ETC6H5	EMKA		11-JUN-93	11-JUN-93	.002	UGG
	ETC6H5	EMMA		15-JUN-93	15-JUN-93	.002	UGG
	ETC6H5	EMNA		15-JUN-93	15-JUN-93	.07	UGG
	ETC6H5	EMOA		16-JUN-93	16-JUN-93	.07	UGG
	ETC6H5	YGTB		23-AUG-94	23-AUG-94	.0017	UGG
	ETC6H5	YGBW		27-AUG-94	27-AUG-94	.0017	UGG
	MEC6H5	EMJA		10-JUN-93	10-JUN-93	.001	UGG
	MEC6H5	EMKA		11-JUN-93	11-JUN-93	.001	UGG
	MEC6H5	EMMA		15-JUN-93	15-JUN-93	.04	UGG
	MEC6H5	EMNA		15-JUN-93	15-JUN-93	.04	UGG
	MEC6H5	EMOA		16-JUN-93	16-JUN-93	.00086	UGG
	MEC6H5	YGTB		23-AUG-94	23-AUG-94	.00078	UGG
	MEC6H5	YGBW		27-AUG-94	27-AUG-94	.07	UGG
	MEK	EMJA		10-JUN-93	10-JUN-93	.07	UGG
	MEK	EMKA		11-JUN-93	11-JUN-93	.07	UGG
	MEK	EMMA		15-JUN-93	15-JUN-93	.07	UGG
	MEK	EMNA		15-JUN-93	15-JUN-93	.4	UGG
	MEK	EMOA		16-JUN-93	16-JUN-93	.07	UGG
	MEK	YGTB		23-AUG-94	23-AUG-94	.07	UGG
	MEK	YGBW		27-AUG-94	27-AUG-94	.07	UGG
	MIBK	EMJA		10-JUN-93	10-JUN-93	.027	UGG
	MIBK	EMKA		11-JUN-93	11-JUN-93	.027	UGG
	MIBK	EMMA		15-JUN-93	15-JUN-93	.027	UGG
	MIBK	EMNA		15-JUN-93	15-JUN-93	1	UGG
	MIBK	EMOA		16-JUN-93	16-JUN-93	1	UGG
	MIBK	YGTB		23-AUG-94	23-AUG-94	.027	UGG
	MIBK	YGBW		27-AUG-94	27-AUG-94	.027	UGG
	MNBK	EMJA		10-JUN-93	10-JUN-93	.032	UGG
	MNBK	EMKA		11-JUN-93	11-JUN-93	.032	UGG
	MNBK	EMMA		15-JUN-93	15-JUN-93	.032	UGG
	MNBK	EMNA		15-JUN-93	15-JUN-93	2	UGG
	MNBK	EMOA		16-JUN-93	16-JUN-93	2	UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
VOC'S IN SOIL BY GC/MS	LM19	MNBK	YGTB		23-AUG-94	23-AUG-94	<	.032	UGG
VOC'S IN SOIL BY GC/MS		MNBK	YGTB		27-AUG-94	27-AUG-94	<	.032	UGG
VOC'S IN SOIL BY GC/MS		STYR	EMJA		10-JUN-93	10-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		STYR	EMJA		11-JUN-93	11-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		STYR	EMJA		15-JUN-93	15-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		STYR	EMJA		15-JUN-93	15-JUN-93	<	.1	UGG
VOC'S IN SOIL BY GC/MS		STYR	EMJA		16-JUN-93	16-JUN-93	<	.1	UGG
VOC'S IN SOIL BY GC/MS		STYR	YGTB		23-AUG-94	23-AUG-94	<	.0026	UGG
VOC'S IN SOIL BY GC/MS		STYR	YGTB		27-AUG-94	27-AUG-94	<	.0026	UGG
VOC'S IN SOIL BY GC/MS		T13DCP	EMJA		10-JUN-93	10-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		T13DCP	EMJA		11-JUN-93	11-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		T13DCP	EMJA		15-JUN-93	15-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		T13DCP	EMJA		15-JUN-93	15-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		T13DCP	EMJA		16-JUN-93	16-JUN-93	<	.1	UGG
VOC'S IN SOIL BY GC/MS		T13DCP	YGTB		23-AUG-94	23-AUG-94	<	.0028	UGG
VOC'S IN SOIL BY GC/MS		T13DCP	YGTB		27-AUG-94	27-AUG-94	<	.0028	UGG
VOC'S IN SOIL BY GC/MS		TCLEA	EMJA		10-JUN-93	10-JUN-93	<	.002	UGG
VOC'S IN SOIL BY GC/MS		TCLEA	EMJA		11-JUN-93	11-JUN-93	<	.002	UGG
VOC'S IN SOIL BY GC/MS		TCLEA	EMJA		15-JUN-93	15-JUN-93	<	.002	UGG
VOC'S IN SOIL BY GC/MS		TCLEA	EMJA		16-JUN-93	16-JUN-93	<	.1	UGG
VOC'S IN SOIL BY GC/MS		TCLEA	YGTB		23-AUG-94	23-AUG-94	<	.0024	UGG
VOC'S IN SOIL BY GC/MS		TCLEA	YGTB		27-AUG-94	27-AUG-94	<	.0024	UGG
VOC'S IN SOIL BY GC/MS		TCLEE	EMJA		10-JUN-93	10-JUN-93	<	.001	UGG
VOC'S IN SOIL BY GC/MS		TCLEE	EMJA		11-JUN-93	11-JUN-93	<	.001	UGG
VOC'S IN SOIL BY GC/MS		TCLEE	EMJA		15-JUN-93	15-JUN-93	<	.001	UGG
VOC'S IN SOIL BY GC/MS		TCLEE	EMJA		15-JUN-93	15-JUN-93	<	.04	UGG
VOC'S IN SOIL BY GC/MS		TCLEE	EMJA		16-JUN-93	16-JUN-93	<	.04	UGG
VOC'S IN SOIL BY GC/MS		TCLEE	YGTB		23-AUG-94	23-AUG-94	<	.00081	UGG
VOC'S IN SOIL BY GC/MS		TCLEE	YGTB		27-AUG-94	27-AUG-94	<	.00081	UGG
VOC'S IN SOIL BY GC/MS		TRCLE	EMJA		10-JUN-93	10-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		TRCLE	EMJA		11-JUN-93	11-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		TRCLE	EMJA		15-JUN-93	15-JUN-93	<	.003	UGG
VOC'S IN SOIL BY GC/MS		TRCLE	EMJA		15-JUN-93	15-JUN-93	<	.1	UGG

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

USATHAMA Method Code	Method Description	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
LM19	VOC'S IN SOIL BY GC/MS	TRCLE	EMOA		16-JUN-93	16-JUN-93	<	.1	UGG
	VOC'S IN SOIL BY GC/MS	TRCLE	YGTB		23-AUG-94	23-AUG-94	<	.0028	UGG
	VOC'S IN SOIL BY GC/MS	TRCLE	YGTB		27-AUG-94	27-AUG-94	<	.0028	UGG
	VOC'S IN SOIL BY GC/MS	XYLEN	EMJA		10-JUN-93	10-JUN-93	<	.002	UGG
	VOC'S IN SOIL BY GC/MS	XYLEN	EMKA		11-JUN-93	11-JUN-93	<	.002	UGG
	VOC'S IN SOIL BY GC/MS	XYLEN	EMMA		15-JUN-93	15-JUN-93	<	.002	UGG
	VOC'S IN SOIL BY GC/MS	XYLEN	EMMA		15-JUN-93	15-JUN-93	<	.08	UGG
	VOC'S IN SOIL BY GC/MS	XYLEN	EMMA		16-JUN-93	16-JUN-93	<	.08	UGG
SB01	HG IN WATER BY CVAA	HG	FGBA		16-JUL-93	16-JUL-93	<	.243	UGL
	HG IN WATER BY CVAA	HG	IEDA		12-OCT-93	12-OCT-93	<	.243	UGL
SD09	TL IN WATER BY GFAA	TL	DNTA		20-JUL-93	28-JUL-93	<	6.99	UGL
	TL IN WATER BY GFAA	TL	GMQA		20-OCT-93	02-NOV-93	<	6.99	UGL
SD20	PB IN WATER BY GFAA	PB	EMGA		20-JUL-93	28-JUL-93	<	1.26	UGL
	PB IN WATER BY GFAA	PB	INFA		09-NOV-93	09-NOV-93	<	1.26	UGL
	PB IN WATER BY GFAA	PB	INGA		20-OCT-93	05-NOV-93	<	1.26	UGL
SD21	SE IN WATER BY GFAA	SE	EFOA		20-JUL-93	29-JUL-93	<	3.02	UGL
	SE IN WATER BY GFAA	SE	HNMA		20-OCT-93	04-NOV-93	<	3.02	UGL
SD22	AS IN WATER BY GFAA	AS	ESJA		20-JUL-93	29-JUL-93	<	2.54	UGL
	AS IN WATER BY GFAA	AS	HOKA		20-OCT-93	05-NOV-93	<	2.54	UGL
SD28	SB IN WATER BY GFAA	SB	FRAA		20-JUL-93	30-JUL-93	<	3.03	UGL
	SB IN WATER BY GFAA	SB	FRTA		19-OCT-93	05-NOV-93	<	3.03	UGL
SS10	METALS IN WATER BY ICAP	AG	EVHA		15-JUL-93	20-JUL-93	<	4.6	UGL
	METALS IN WATER BY ICAP	AG	HXIA		12-OCT-93	15-OCT-93	<	4.6	UGL
	METALS IN WATER BY ICAP	AL	EVHA		15-JUL-93	20-JUL-93	<	141	UGL
	METALS IN WATER BY ICAP	AL	HXIA		12-OCT-93	15-OCT-93	<	141	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAWA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
METALS IN WATER BY ICAP	SS10	BA	EVHA		15-JUL-93	20-JUL-93	<	5 UGL
METALS IN WATER BY ICAP		BA	HX1A		12-OCT-93	15-OCT-93	<	5 UGL
METALS IN WATER BY ICAP		BE	EVHA		15-JUL-93	20-JUL-93	<	5 UGL
METALS IN WATER BY ICAP		BE	HX1A		12-OCT-93	15-OCT-93	<	5 UGL
METALS IN WATER BY ICAP		CA	EVHA		15-JUL-93	20-JUL-93	<	500 UGL
METALS IN WATER BY ICAP		CA	HX1A		12-OCT-93	15-OCT-93	<	500 UGL
METALS IN WATER BY ICAP		CA	HXOA		12-NOV-93	14-NOV-93	<	500 UGL
METALS IN WATER BY ICAP		CD	EVHA		15-JUL-93	20-JUL-93	<	4.01 UGL
METALS IN WATER BY ICAP		CD	HX1A		12-OCT-93	15-OCT-93	<	4.01 UGL
METALS IN WATER BY ICAP		CO	EVHA		15-JUL-93	20-JUL-93	<	25 UGL
METALS IN WATER BY ICAP		CO	HX1A		12-OCT-93	15-OCT-93	<	25 UGL
METALS IN WATER BY ICAP		CR	EVHA		15-JUL-93	20-JUL-93	<	6.02 UGL
METALS IN WATER BY ICAP		CR	HX1A		12-OCT-93	15-OCT-93	<	6.02 UGL
METALS IN WATER BY ICAP		CU	EVHA		15-JUL-93	20-JUL-93	<	8.09 UGL
METALS IN WATER BY ICAP		CU	HX1A		12-OCT-93	15-OCT-93	<	8.09 UGL
METALS IN WATER BY ICAP		FE	EVHA		15-JUL-93	20-JUL-93	<	38.8 UGL
METALS IN WATER BY ICAP		FE	HX1A		12-OCT-93	15-OCT-93	<	38.8 UGL
METALS IN WATER BY ICAP		K	EVHA		15-JUL-93	20-JUL-93	<	375 UGL
METALS IN WATER BY ICAP		K	HX1A		12-OCT-93	15-OCT-93	<	375 UGL
METALS IN WATER BY ICAP		K	HXOA		12-NOV-93	14-NOV-93	<	375 UGL
METALS IN WATER BY ICAP		MG	EVHA		15-JUL-93	20-JUL-93	<	500 UGL
METALS IN WATER BY ICAP		MG	HX1A		12-OCT-93	15-OCT-93	<	500 UGL
METALS IN WATER BY ICAP		MG	HXOA		12-NOV-93	14-NOV-93	<	500 UGL
METALS IN WATER BY ICAP		MN	EVHA		15-JUL-93	20-JUL-93	<	2.75 UGL
METALS IN WATER BY ICAP		MN	HX1A		12-OCT-93	15-OCT-93	<	2.75 UGL
METALS IN WATER BY ICAP		NA	EVHA		15-JUL-93	20-JUL-93	<	500 UGL
METALS IN WATER BY ICAP		NA	HX1A		12-OCT-93	15-OCT-93	<	500 UGL
METALS IN WATER BY ICAP		NI	EVHA		15-JUL-93	20-JUL-93	<	34.3 UGL
METALS IN WATER BY ICAP		NI	HX1A		12-OCT-93	15-OCT-93	<	34.3 UGL
METALS IN WATER BY ICAP		V	EVHA		15-JUL-93	20-JUL-93	<	11 UGL
METALS IN WATER BY ICAP		V	HX1A		12-OCT-93	15-OCT-93	<	11 UGL
METALS IN WATER BY ICAP		ZN	EVHA		15-JUL-93	20-JUL-93	<	21.1 UGL
METALS IN WATER BY ICAP		ZN	HX1A		12-OCT-93	15-OCT-93	<	21.1 UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

USATHAMA		Method Code	Test Name	Lot	Lab. Number	Prep Date	Analysis Date	<	Value	Units
NO2, NO3 IN WATER	NO2, NO3 IN WATER	TF22	NIT	EQDA		14-JUL-93	14-JUL-93	<	10	UGL
			NIT	EQRA		04-OCT-93	04-OCT-93	<	10	UGL
		TT10	CL	DEOA		14-JUL-93	14-JUL-93	<	2120	UGL
			CL	IOAA		28-SEP-93	28-SEP-93	<	2120	UGL
SO4 IN WATER	SO4 IN WATER		F	IOAA		28-SEP-93	28-SEP-93	<	1230	UGL
			SO4	DEOA		14-JUL-93	14-JUL-93	<	10000	UGL
			SO4	IOAA		28-SEP-93	28-SEP-93	<	10000	UGL
			SO4	IOAA		28-SEP-93	28-SEP-93	<	10000	UGL
BNA'S IN WATER BY GC/MS	BNA'S IN WATER BY GC/MS	UM18	124TCB	ETKA		01-JUL-93	07-JUL-93	<	1.8	UGL
			124TCB	ETNA		02-JUL-93	14-JUL-93	<	1.8	UGL
			124TCB	IFDA		27-SEP-93	18-OCT-93	<	1.8	UGL
			124TCB	IFEA		28-SEP-93	15-OCT-93	<	1.8	UGL
			124TCB	IFGA		01-OCT-93	12-OCT-93	<	1.8	UGL
			120CLB	ETKA		01-JUL-93	07-JUL-93	<	1.7	UGL
			120CLB	ETNA		02-JUL-93	14-JUL-93	<	1.7	UGL
			120CLB	IFDA		27-SEP-93	18-OCT-93	<	1.7	UGL
			120CLB	IFEA		28-SEP-93	15-OCT-93	<	1.7	UGL
			120CLB	IFGA		01-OCT-93	12-OCT-93	<	1.7	UGL
			120PH	ETKA		01-JUL-93	07-JUL-93	<	2	UGL
			120PH	ETNA		02-JUL-93	14-JUL-93	<	2	UGL
			120PH	IFDA		27-SEP-93	18-OCT-93	<	2	UGL
			120PH	IFEA		28-SEP-93	15-OCT-93	<	2	UGL
			120PH	IFGA		01-OCT-93	12-OCT-93	<	2	UGL
			130CLB	ETKA		01-JUL-93	07-JUL-93	<	1.7	UGL
			130CLB	ETNA		02-JUL-93	14-JUL-93	<	1.7	UGL
			130CLB	IFDA		27-SEP-93	18-OCT-93	<	1.7	UGL
			130CLB	IFEA		28-SEP-93	15-OCT-93	<	1.7	UGL
			130CLB	IFGA		01-OCT-93	12-OCT-93	<	1.7	UGL
			140CLB	ETKA		01-JUL-93	07-JUL-93	<	1.7	UGL
			140CLB	ETNA		02-JUL-93	14-JUL-93	<	1.7	UGL
			140CLB	IFDA		27-SEP-93	18-OCT-93	<	1.7	UGL
			140CLB	IFEA		28-SEP-93	15-OCT-93	<	1.7	UGL
			140CLB	IFGA		01-OCT-93	12-OCT-93	<	1.7	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

USATHAMA		Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
		UM18	245TCP	ETKA		01-JUL-93	07-JUL-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS			245TCP	ETNA		02-JUL-93	14-JUL-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS			245TCP	IFDA		27-SEP-93	18-OCT-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS			245TCP	IFEA		28-SEP-93	15-OCT-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS			245TCP	IFGA		01-OCT-93	12-OCT-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS			246TCP	ETKA		01-JUL-93	07-JUL-93	<	4.2	UGL
BNA'S IN WATER BY GC/MS			246TCP	ETNA		02-JUL-93	14-JUL-93	<	4.2	UGL
BNA'S IN WATER BY GC/MS			246TCP	IFDA		27-SEP-93	18-OCT-93	<	4.2	UGL
BNA'S IN WATER BY GC/MS			246TCP	IFEA		28-SEP-93	15-OCT-93	<	4.2	UGL
BNA'S IN WATER BY GC/MS			246TCP	IFGA		01-OCT-93	12-OCT-93	<	4.2	UGL
BNA'S IN WATER BY GC/MS			246CLP	ETKA		01-JUL-93	07-JUL-93	<	2.9	UGL
BNA'S IN WATER BY GC/MS			246CLP	ETNA		02-JUL-93	14-JUL-93	<	2.9	UGL
BNA'S IN WATER BY GC/MS			246CLP	IFDA		27-SEP-93	18-OCT-93	<	2.9	UGL
BNA'S IN WATER BY GC/MS			246CLP	IFEA		28-SEP-93	15-OCT-93	<	2.9	UGL
BNA'S IN WATER BY GC/MS			246CLP	IFGA		01-OCT-93	12-OCT-93	<	2.9	UGL
BNA'S IN WATER BY GC/MS			246MPN	ETKA		01-JUL-93	07-JUL-93	<	5.8	UGL
BNA'S IN WATER BY GC/MS			246MPN	ETNA		02-JUL-93	14-JUL-93	<	5.8	UGL
BNA'S IN WATER BY GC/MS			246MPN	IFDA		27-SEP-93	18-OCT-93	<	5.8	UGL
BNA'S IN WATER BY GC/MS			246MPN	IFEA		28-SEP-93	15-OCT-93	<	5.8	UGL
BNA'S IN WATER BY GC/MS			246NP	ETKA		01-JUL-93	07-JUL-93	<	21	UGL
BNA'S IN WATER BY GC/MS			246NP	ETNA		02-JUL-93	14-JUL-93	<	21	UGL
BNA'S IN WATER BY GC/MS			246NP	IFDA		27-SEP-93	18-OCT-93	<	21	UGL
BNA'S IN WATER BY GC/MS			246NP	IFEA		28-SEP-93	15-OCT-93	<	21	UGL
BNA'S IN WATER BY GC/MS			246NP	IFGA		01-OCT-93	12-OCT-93	<	21	UGL
BNA'S IN WATER BY GC/MS			246NT	ETKA		01-JUL-93	07-JUL-93	<	4.5	UGL
BNA'S IN WATER BY GC/MS			246NT	ETNA		02-JUL-93	14-JUL-93	<	4.5	UGL
BNA'S IN WATER BY GC/MS			246NT	IFDA		27-SEP-93	18-OCT-93	<	4.5	UGL
BNA'S IN WATER BY GC/MS			246NT	IFEA		28-SEP-93	15-OCT-93	<	4.5	UGL
BNA'S IN WATER BY GC/MS			246NT	IFGA		01-OCT-93	12-OCT-93	<	4.5	UGL
BNA'S IN WATER BY GC/MS			260NT	ETKA		01-JUL-93	07-JUL-93	<	.79	UGL
BNA'S IN WATER BY GC/MS			260NT	ETNA		02-JUL-93	14-JUL-93	<	.79	UGL
BNA'S IN WATER BY GC/MS			260NT	IFDA		27-SEP-93	18-OCT-93	<	.79	UGL
BNA'S IN WATER BY GC/MS			260NT	IFEA		28-SEP-93	15-OCT-93	<	.79	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
BNA'S IN WATER BY GC/MS	UM18	26DNT	IFGA		01-OCT-93	12-OCT-93	<	.79 UGL
BNA'S IN WATER BY GC/MS		2CLP	ETKA		01-JUL-93	07-JUL-93	<	.99 UGL
BNA'S IN WATER BY GC/MS		2CLP	ETNA		02-JUL-93	14-JUL-93	<	.99 UGL
BNA'S IN WATER BY GC/MS		2CLP	IFDA		27-SEP-93	18-OCT-93	<	.99 UGL
BNA'S IN WATER BY GC/MS		2CLP	IFEA		28-SEP-93	15-OCT-93	<	.99 UGL
BNA'S IN WATER BY GC/MS		2CLP	IFGA		01-OCT-93	12-OCT-93	<	.99 UGL
BNA'S IN WATER BY GC/MS		2CNAP	ETKA		01-JUL-93	07-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		2CNAP	ETNA		02-JUL-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		2CNAP	IFDA		27-SEP-93	18-OCT-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		2CNAP	IFEA		28-SEP-93	15-OCT-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		2CNAP	IFGA		01-OCT-93	12-OCT-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		2NNAP	ETKA		01-JUL-93	07-JUL-93	<	1.7 UGL
BNA'S IN WATER BY GC/MS		2NNAP	ETNA		02-JUL-93	14-JUL-93	<	1.7 UGL
BNA'S IN WATER BY GC/MS		2NNAP	IFDA		27-SEP-93	18-OCT-93	<	1.7 UGL
BNA'S IN WATER BY GC/MS		2NNAP	IFEA		28-SEP-93	15-OCT-93	<	1.7 UGL
BNA'S IN WATER BY GC/MS		2NP	ETKA		01-JUL-93	07-JUL-93	<	3.9 UGL
BNA'S IN WATER BY GC/MS		2NP	ETNA		02-JUL-93	14-JUL-93	<	3.9 UGL
BNA'S IN WATER BY GC/MS		2NP	IFDA		27-SEP-93	18-OCT-93	<	3.9 UGL
BNA'S IN WATER BY GC/MS		2NP	IFEA		28-SEP-93	15-OCT-93	<	3.9 UGL
BNA'S IN WATER BY GC/MS		2NP	IFGA		01-OCT-93	12-OCT-93	<	3.9 UGL
BNA'S IN WATER BY GC/MS		2NANIL	ETKA		01-JUL-93	07-JUL-93	<	4.3 UGL
BNA'S IN WATER BY GC/MS		2NANIL	ETNA		02-JUL-93	14-JUL-93	<	4.3 UGL
BNA'S IN WATER BY GC/MS		2NANIL	IFDA		27-SEP-93	18-OCT-93	<	4.3 UGL
BNA'S IN WATER BY GC/MS		2NANIL	IFEA		28-SEP-93	15-OCT-93	<	4.3 UGL
BNA'S IN WATER BY GC/MS		2NANIL	IFGA		01-OCT-93	12-OCT-93	<	4.3 UGL
BNA'S IN WATER BY GC/MS		2NP	ETKA		01-JUL-93	07-JUL-93	<	3.7 UGL
BNA'S IN WATER BY GC/MS		2NP	ETNA		02-JUL-93	14-JUL-93	<	3.7 UGL
BNA'S IN WATER BY GC/MS		2NP	IFDA		27-SEP-93	18-OCT-93	<	3.7 UGL
BNA'S IN WATER BY GC/MS		2NP	IFEA		28-SEP-93	15-OCT-93	<	3.7 UGL
BNA'S IN WATER BY GC/MS		2NP	IFGA		01-OCT-93	12-OCT-93	<	3.7 UGL
BNA'S IN WATER BY GC/MS		33DCBD	ETKA		01-JUL-93	07-JUL-93	<	12 UGL
BNA'S IN WATER BY GC/MS		33DCBD	ETNA		02-JUL-93	14-JUL-93	<	12 UGL
BNA'S IN WATER BY GC/MS		33DCBD	IFDA		27-SEP-93	18-OCT-93	<	12 UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value Units
BNA'S IN WATER BY GC/MS	UM18	330C8D	IFEA		28-SEP-93	15-OCT-93	<	12 UGL
BNA'S IN WATER BY GC/MS		330C8D	IFGA		01-OCT-93	12-OCT-93	<	12 UGL
BNA'S IN WATER BY GC/MS		3NANIL	ETKA		01-JUL-93	07-JUL-93	<	4.9 UGL
BNA'S IN WATER BY GC/MS		3NANIL	ETNA		02-JUL-93	14-JUL-93	<	4.9 UGL
BNA'S IN WATER BY GC/MS		3NANIL	IFDA		27-SEP-93	18-OCT-93	<	4.9 UGL
BNA'S IN WATER BY GC/MS		3NANIL	IFEA		28-SEP-93	15-OCT-93	<	4.9 UGL
BNA'S IN WATER BY GC/MS		3NANIL	IFGA		01-OCT-93	12-OCT-93	<	4.9 UGL
BNA'S IN WATER BY GC/MS		460N2C	ETKA		01-JUL-93	07-JUL-93	<	17 UGL
BNA'S IN WATER BY GC/MS		460N2C	ETNA		02-JUL-93	14-JUL-93	<	17 UGL
BNA'S IN WATER BY GC/MS		460N2C	IFDA		27-SEP-93	18-OCT-93	<	17 UGL
BNA'S IN WATER BY GC/MS		460N2C	IFEA		28-SEP-93	15-OCT-93	<	17 UGL
BNA'S IN WATER BY GC/MS		460N2C	IFGA		01-OCT-93	12-OCT-93	<	17 UGL
BNA'S IN WATER BY GC/MS		4BRPPE	ETKA		01-JUL-93	07-JUL-93	<	4.2 UGL
BNA'S IN WATER BY GC/MS		4BRPPE	ETNA		02-JUL-93	14-JUL-93	<	4.2 UGL
BNA'S IN WATER BY GC/MS		4BRPPE	IFDA		27-SEP-93	18-OCT-93	<	4.2 UGL
BNA'S IN WATER BY GC/MS		4BRPPE	IFEA		28-SEP-93	15-OCT-93	<	4.2 UGL
BNA'S IN WATER BY GC/MS		4BRPPE	IFGA		01-OCT-93	12-OCT-93	<	4.2 UGL
BNA'S IN WATER BY GC/MS		4CANIL	ETKA		01-JUL-93	07-JUL-93	<	7.3 UGL
BNA'S IN WATER BY GC/MS		4CANIL	ETNA		02-JUL-93	14-JUL-93	<	7.3 UGL
BNA'S IN WATER BY GC/MS		4CANIL	IFDA		27-SEP-93	18-OCT-93	<	7.3 UGL
BNA'S IN WATER BY GC/MS		4CANIL	IFEA		28-SEP-93	15-OCT-93	<	7.3 UGL
BNA'S IN WATER BY GC/MS		4CANIL	IFGA		01-OCT-93	12-OCT-93	<	7.3 UGL
BNA'S IN WATER BY GC/MS		4CL3C	ETKA		01-JUL-93	07-JUL-93	<	4 UGL
BNA'S IN WATER BY GC/MS		4CL3C	ETNA		02-JUL-93	14-JUL-93	<	4 UGL
BNA'S IN WATER BY GC/MS		4CL3C	IFDA		27-SEP-93	18-OCT-93	<	4 UGL
BNA'S IN WATER BY GC/MS		4CL3C	IFEA		28-SEP-93	15-OCT-93	<	4 UGL
BNA'S IN WATER BY GC/MS		4CL3C	IFGA		01-OCT-93	12-OCT-93	<	4 UGL
BNA'S IN WATER BY GC/MS		4CLPPE	ETKA		01-JUL-93	07-JUL-93	<	5.1 UGL
BNA'S IN WATER BY GC/MS		4CLPPE	ETNA		02-JUL-93	14-JUL-93	<	5.1 UGL
BNA'S IN WATER BY GC/MS		4CLPPE	IFDA		27-SEP-93	18-OCT-93	<	5.1 UGL
BNA'S IN WATER BY GC/MS		4CLPPE	IFEA		28-SEP-93	15-OCT-93	<	5.1 UGL
BNA'S IN WATER BY GC/MS		4CLPPE	IFGA		01-OCT-93	12-OCT-93	<	5.1 UGL
BNA'S IN WATER BY GC/MS		4MP	ETKA		01-JUL-93	07-JUL-93	<	.52 UGL
BNA'S IN WATER BY GC/MS		4MP	ETNA		02-JUL-93	14-JUL-93	<	.52 UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	4MP	IFDA		27-SEP-93	18-OCT-93	<	.52	UGL
BNA'S IN WATER BY GC/MS		4MP	IFGA		28-SEP-93	15-OCT-93	<	.52	UGL
BNA'S IN WATER BY GC/MS		4MP	IFGA		01-OCT-93	12-OCT-93	<	.52	UGL
BNA'S IN WATER BY GC/MS		4NANIL	ETKA		01-JUL-93	07-JUL-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS		4NANIL	ETNA		02-JUL-93	14-JUL-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS		4NANIL	IFDA		27-SEP-93	18-OCT-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS		4NANIL	IFGA		28-SEP-93	15-OCT-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS		4NANIL	IFGA		01-OCT-93	12-OCT-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS		4NP	ETKA		01-JUL-93	07-JUL-93	<	12	UGL
BNA'S IN WATER BY GC/MS		4NP	ETNA		02-JUL-93	14-JUL-93	<	12	UGL
BNA'S IN WATER BY GC/MS		4NP	IFDA		27-SEP-93	18-OCT-93	<	12	UGL
BNA'S IN WATER BY GC/MS		4NP	IFGA		28-SEP-93	15-OCT-93	<	12	UGL
BNA'S IN WATER BY GC/MS		4NP	IFGA		01-OCT-93	12-OCT-93	<	12	UGL
BNA'S IN WATER BY GC/MS		ABHC	ETKA		01-JUL-93	07-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		ABHC	ETNA		02-JUL-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		ABHC	IFDA		27-SEP-93	18-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		ABHC	IFGA		28-SEP-93	15-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		ABHC	IFGA		01-OCT-93	12-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		ACLDAN	ETKA		01-JUL-93	07-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		ACLDAN	ETNA		02-JUL-93	14-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		ACLDAN	IFDA		27-SEP-93	18-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		ACLDAN	IFGA		28-SEP-93	15-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		ACLDAN	IFGA		01-OCT-93	12-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		AENSLF	ETKA		01-JUL-93	07-JUL-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		AENSLF	ETNA		02-JUL-93	14-JUL-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		AENSLF	IFDA		27-SEP-93	18-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		AENSLF	IFGA		28-SEP-93	15-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		AENSLF	IFGA		01-OCT-93	12-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		ALDRN	ETKA		01-JUL-93	07-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		ALDRN	ETNA		02-JUL-93	14-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		ALDRN	IFDA		27-SEP-93	18-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		ALDRN	IFGA		28-SEP-93	15-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		ALDRN	IFGA		01-OCT-93	12-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		ANAPNE	ETKA		01-JUL-93	07-JUL-93	<	1.7	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAWA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	ANAPNE	ETNA		02-JUL-93	14-JUL-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		ANAPNE	IFDA		27-SEP-93	18-OCT-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		ANAPNE	IFEA		28-SEP-93	15-OCT-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		ANAPYL	ETKA		01-OCT-93	12-OCT-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		ANAPYL	ETNA		01-JUL-93	07-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANAPYL	IFDA		02-JUL-93	14-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANAPYL	IFEA		27-SEP-93	18-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANAPYL	IFGA		28-SEP-93	15-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANTRC	ETKA		01-OCT-93	12-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANTRC	ETNA		01-JUL-93	07-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANTRC	IFDA		02-JUL-93	14-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANTRC	IFEA		27-SEP-93	18-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		ANTRC	IFGA		28-SEP-93	15-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		B2CEXM	ETKA		01-OCT-93	12-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		B2CEXM	ETNA		01-JUL-93	07-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		B2CEXM	IFDA		02-JUL-93	14-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		B2CEXM	IFEA		27-SEP-93	18-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		B2CEXM	IFGA		28-SEP-93	15-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		B2CIPE	ETKA		01-OCT-93	12-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		B2CIPE	ETNA		01-JUL-93	07-JUL-93	<	5.3	UGL
BNA'S IN WATER BY GC/MS		B2CIPE	IFDA		02-JUL-93	14-JUL-93	<	5.3	UGL
BNA'S IN WATER BY GC/MS		B2CIPE	IFEA		27-SEP-93	18-OCT-93	<	5.3	UGL
BNA'S IN WATER BY GC/MS		B2CIPE	IFGA		28-SEP-93	15-OCT-93	<	5.3	UGL
BNA'S IN WATER BY GC/MS		B2CLEE	ETKA		01-OCT-93	12-OCT-93	<	5.3	UGL
BNA'S IN WATER BY GC/MS		B2CLEE	ETNA		01-JUL-93	07-JUL-93	<	1.9	UGL
BNA'S IN WATER BY GC/MS		B2CLEE	IFDA		02-JUL-93	14-JUL-93	<	1.9	UGL
BNA'S IN WATER BY GC/MS		B2CLEE	IFEA		27-SEP-93	18-OCT-93	<	1.9	UGL
BNA'S IN WATER BY GC/MS		B2CLEE	IFGA		28-SEP-93	15-OCT-93	<	1.9	UGL
BNA'S IN WATER BY GC/MS		B2EHP	ETKA		01-OCT-93	12-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		B2EHP	ETNA		01-JUL-93	07-JUL-93	<	6.2	UGL
BNA'S IN WATER BY GC/MS		B2EHP	IFDA		02-JUL-93	14-JUL-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS		B2EHP	IFEA		27-SEP-93	18-OCT-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS		B2EHP	IFGA		28-SEP-93	15-OCT-93	<	4.8	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	BAANTR	ETKA		01-JUL-93	07-JUL-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		BAANTR	ETNA		02-JUL-93	14-JUL-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		BAANTR	IFDA		27-SEP-93	18-OCT-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		BAANTR	IFEA		28-SEP-93	15-OCT-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		BAANTR	IFEA		01-OCT-93	12-OCT-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		BAPYR	ETKA		01-JUL-93	07-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		BAPYR	ETNA		02-JUL-93	14-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		BAPYR	IFDA		27-SEP-93	18-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		BAPYR	IFEA		28-SEP-93	15-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		BAPYR	IFEA		01-OCT-93	12-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		BBFANT	ETKA		01-JUL-93	07-JUL-93	<	5.4	UGL
BNA'S IN WATER BY GC/MS		BBFANT	ETNA		02-JUL-93	14-JUL-93	<	5.4	UGL
BNA'S IN WATER BY GC/MS		BBFANT	IFDA		27-SEP-93	18-OCT-93	<	5.4	UGL
BNA'S IN WATER BY GC/MS		BBFANT	IFEA		28-SEP-93	15-OCT-93	<	5.4	UGL
BNA'S IN WATER BY GC/MS		BBFANT	IFEA		01-OCT-93	12-OCT-93	<	5.4	UGL
BNA'S IN WATER BY GC/MS		BBHC	ETKA		01-JUL-93	07-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		BBHC	ETNA		02-JUL-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		BBHC	IFDA		27-SEP-93	18-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		BBHC	IFEA		28-SEP-93	15-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		BBZP	ETKA		01-JUL-93	07-JUL-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		BBZP	ETNA		02-JUL-93	14-JUL-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		BBZP	IFDA		27-SEP-93	18-OCT-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		BBZP	IFEA		28-SEP-93	15-OCT-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		BBZP	IFEA		01-OCT-93	12-OCT-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		BENSLF	ETKA		01-JUL-93	07-JUL-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		BENSLF	ETNA		02-JUL-93	14-JUL-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		BENSLF	IFDA		27-SEP-93	18-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		BENSLF	IFEA		28-SEP-93	15-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		BENSLF	IFEA		01-OCT-93	12-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		BENZID	ETKA		01-JUL-93	07-JUL-93	<	10	UGL
BNA'S IN WATER BY GC/MS		BENZID	ETNA		02-JUL-93	14-JUL-93	<	10	UGL
BNA'S IN WATER BY GC/MS		BENZID	IFDA		27-SEP-93	18-OCT-93	<	10	UGL
BNA'S IN WATER BY GC/MS		BENZID	IFEA		28-SEP-93	15-OCT-93	<	10	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	BENZID	IFGA		01-OCT-93	12-OCT-93	<	10	UGL
BNA'S IN WATER BY GC/MS		BENZO	ETKA		01-JUL-93	07-JUL-93	<	13	UGL
BNA'S IN WATER BY GC/MS		BENZO	ETNA		02-JUL-93	14-JUL-93	<	13	UGL
BNA'S IN WATER BY GC/MS		BENZO	IFDA		27-SEP-93	18-OCT-93	<	13	UGL
BNA'S IN WATER BY GC/MS		BENZO	IFEA		28-SEP-93	15-OCT-93	<	13	UGL
BNA'S IN WATER BY GC/MS		BENZO	IFGA		01-OCT-93	12-OCT-93	<	13	UGL
BNA'S IN WATER BY GC/MS		BGHIPI	ETKA		01-JUL-93	07-JUL-93	<	6.1	UGL
BNA'S IN WATER BY GC/MS		BGHIPI	ETNA		02-JUL-93	14-JUL-93	<	6.1	UGL
BNA'S IN WATER BY GC/MS		BGHIPI	IFDA		27-SEP-93	18-OCT-93	<	6.1	UGL
BNA'S IN WATER BY GC/MS		BGHIPI	IFEA		28-SEP-93	15-OCT-93	<	6.1	UGL
BNA'S IN WATER BY GC/MS		BGHIPI	IFGA		01-OCT-93	12-OCT-93	<	6.1	UGL
BNA'S IN WATER BY GC/MS		BKFANT	ETKA		01-JUL-93	07-JUL-93	<	.87	UGL
BNA'S IN WATER BY GC/MS		BKFANT	ETNA		02-JUL-93	14-JUL-93	<	.87	UGL
BNA'S IN WATER BY GC/MS		BKFANT	IFDA		27-SEP-93	18-OCT-93	<	.87	UGL
BNA'S IN WATER BY GC/MS		BKFANT	IFEA		28-SEP-93	15-OCT-93	<	.87	UGL
BNA'S IN WATER BY GC/MS		BKFANT	IFGA		01-OCT-93	12-OCT-93	<	.87	UGL
BNA'S IN WATER BY GC/MS		BZALC	ETKA		01-JUL-93	07-JUL-93	<	.72	UGL
BNA'S IN WATER BY GC/MS		BZALC	ETNA		02-JUL-93	14-JUL-93	<	.72	UGL
BNA'S IN WATER BY GC/MS		BZALC	IFDA		27-SEP-93	18-OCT-93	<	.72	UGL
BNA'S IN WATER BY GC/MS		BZALC	IFEA		28-SEP-93	15-OCT-93	<	.72	UGL
BNA'S IN WATER BY GC/MS		BZALC	IFGA		01-OCT-93	12-OCT-93	<	.72	UGL
BNA'S IN WATER BY GC/MS		CARBAZ	ETKA		01-JUL-93	07-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		CARBAZ	ETNA		02-JUL-93	14-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		CARBAZ	IFDA		27-SEP-93	18-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		CARBAZ	IFEA		28-SEP-93	15-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		CARBAZ	IFGA		01-OCT-93	12-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		CHRY	ETKA		01-JUL-93	07-JUL-93	<	2.4	UGL
BNA'S IN WATER BY GC/MS		CHRY	ETNA		02-JUL-93	14-JUL-93	<	2.4	UGL
BNA'S IN WATER BY GC/MS		CHRY	IFDA		27-SEP-93	18-OCT-93	<	2.4	UGL
BNA'S IN WATER BY GC/MS		CHRY	IFEA		28-SEP-93	15-OCT-93	<	2.4	UGL
BNA'S IN WATER BY GC/MS		CHRY	IFGA		01-OCT-93	12-OCT-93	<	2.4	UGL
BNA'S IN WATER BY GC/MS		CL6BZ	ETKA		01-JUL-93	07-JUL-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		CL6BZ	ETNA		02-JUL-93	14-JUL-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		CL6BZ	IFDA		27-SEP-93	18-OCT-93	<	1.6	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	CL68Z	IFEA		28-SEP-93	15-OCT-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		CL68Z	IFGA		01-OCT-93	12-OCT-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS		CL6CP	ETKA		01-JUL-93	07-JUL-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		CL6CP	ETNA		02-JUL-93	14-JUL-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		CL6CP	IFDA		28-SEP-93	18-OCT-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		CL6CP	IFEA		28-SEP-93	15-OCT-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		CL6CP	IFGA		01-OCT-93	12-OCT-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		CL6ET	ETKA		01-JUL-93	07-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		CL6ET	ETNA		02-JUL-93	14-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		CL6ET	IFDA		27-SEP-93	18-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		CL6ET	IFEA		28-SEP-93	15-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		CL6ET	IFGA		01-OCT-93	12-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		DBAHA	ETKA		01-JUL-93	07-JUL-93	<	6.5	UGL
BNA'S IN WATER BY GC/MS		DBAHA	ETNA		02-JUL-93	14-JUL-93	<	6.5	UGL
BNA'S IN WATER BY GC/MS		DBAHA	IFDA		27-SEP-93	18-OCT-93	<	6.5	UGL
BNA'S IN WATER BY GC/MS		DBAHA	IFEA		28-SEP-93	15-OCT-93	<	6.5	UGL
BNA'S IN WATER BY GC/MS		DBAHA	IFGA		01-OCT-93	12-OCT-93	<	6.5	UGL
BNA'S IN WATER BY GC/MS		DBHC	ETKA		01-JUL-93	07-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		DBHC	ETNA		02-JUL-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		DBHC	IFDA		27-SEP-93	18-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		DBHC	IFEA		28-SEP-93	15-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		DBHC	IFGA		01-OCT-93	12-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		DBZFUR	ETKA		01-JUL-93	07-JUL-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		DBZFUR	ETNA		02-JUL-93	14-JUL-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		DBZFUR	IFDA		27-SEP-93	18-OCT-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		DBZFUR	IFEA		28-SEP-93	15-OCT-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		DBZFUR	IFGA		01-OCT-93	12-OCT-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS		DEP	ETKA		01-JUL-93	07-JUL-93	<	2	UGL
BNA'S IN WATER BY GC/MS		DEP	ETNA		02-JUL-93	14-JUL-93	<	2	UGL
BNA'S IN WATER BY GC/MS		DEP	IFDA		27-SEP-93	18-OCT-93	<	2	UGL
BNA'S IN WATER BY GC/MS		DEP	IFEA		28-SEP-93	15-OCT-93	<	2	UGL
BNA'S IN WATER BY GC/MS		DEP	IFGA		01-OCT-93	12-OCT-93	<	2	UGL
BNA'S IN WATER BY GC/MS		DLDNR	ETKA		01-JUL-93	07-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		DLDNR	ETNA		02-JUL-93	14-JUL-93	<	4.7	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	DLDRN	IFDA		27-SEP-93	18-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		DLDRN	IFEA		28-SEP-93	15-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		DLDRN	IFGA		01-OCT-93	12-OCT-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS		DMP	ETKA		01-JUL-93	07-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		DMP	ETNA		02-JUL-93	14-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		DMP	IFDA		27-SEP-93	18-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		DMP	IFEA		28-SEP-93	15-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		DMP	IFGA		01-OCT-93	12-OCT-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS		DNBP	ETKA		01-JUL-93	07-JUL-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		DNBP	ETNA		02-JUL-93	14-JUL-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		DNBP	IFDA		27-SEP-93	18-OCT-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		DNBP	IFEA		28-SEP-93	15-OCT-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		DNBP	IFGA		01-OCT-93	12-OCT-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		DNBP	ETKA		01-JUL-93	07-JUL-93	<	15	UGL
BNA'S IN WATER BY GC/MS		DNBP	ETNA		02-JUL-93	14-JUL-93	<	15	UGL
BNA'S IN WATER BY GC/MS		DNBP	IFDA		27-SEP-93	18-OCT-93	<	15	UGL
BNA'S IN WATER BY GC/MS		DNBP	IFEA		28-SEP-93	15-OCT-93	<	15	UGL
BNA'S IN WATER BY GC/MS		DNBP	IFGA		01-OCT-93	12-OCT-93	<	15	UGL
BNA'S IN WATER BY GC/MS		ENDRN	ETKA		01-JUL-93	07-JUL-93	<	7.6	UGL
BNA'S IN WATER BY GC/MS		ENDRN	ETNA		02-JUL-93	14-JUL-93	<	7.6	UGL
BNA'S IN WATER BY GC/MS		ENDRN	IFDA		27-SEP-93	18-OCT-93	<	7.6	UGL
BNA'S IN WATER BY GC/MS		ENDRN	IFEA		28-SEP-93	15-OCT-93	<	7.6	UGL
BNA'S IN WATER BY GC/MS		ENDRN	IFGA		01-OCT-93	12-OCT-93	<	7.6	UGL
BNA'S IN WATER BY GC/MS		ENDRNA	ETKA		01-JUL-93	07-JUL-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNA	ETNA		02-JUL-93	14-JUL-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNA	IFDA		27-SEP-93	18-OCT-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNA	IFEA		28-SEP-93	15-OCT-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNA	IFGA		01-OCT-93	12-OCT-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNK	ETKA		01-JUL-93	07-JUL-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNK	ETNA		02-JUL-93	14-JUL-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNK	IFDA		27-SEP-93	18-OCT-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNK	IFEA		28-SEP-93	15-OCT-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ENDRNK	IFGA		01-OCT-93	12-OCT-93	<	8	UGL
BNA'S IN WATER BY GC/MS		ESFS04	ETKA		01-JUL-93	07-JUL-93	<	9.2	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	ESFS04	ETNA		02-JUL-93	14-JUL-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		ESFS04	IFDA		27-SEP-93	18-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		ESFS04	IFEA		28-SEP-93	15-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		ESFS04	IFGA		01-OCT-93	12-OCT-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS		FANT	ETKA		01-JUL-93	07-JUL-93	<	3.3	UGL
BNA'S IN WATER BY GC/MS		FANT	ETNA		02-JUL-93	14-JUL-93	<	3.3	UGL
BNA'S IN WATER BY GC/MS		FANT	IFDA		27-SEP-93	18-OCT-93	<	3.3	UGL
BNA'S IN WATER BY GC/MS		FANT	IFEA		28-SEP-93	15-OCT-93	<	3.3	UGL
BNA'S IN WATER BY GC/MS		FANT	IFGA		01-OCT-93	12-OCT-93	<	3.3	UGL
BNA'S IN WATER BY GC/MS		FLRENE	ETKA		01-JUL-93	07-JUL-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		FLRENE	ETNA		02-JUL-93	14-JUL-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		FLRENE	IFDA		27-SEP-93	18-OCT-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		FLRENE	IFEA		28-SEP-93	15-OCT-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		FLRENE	IFGA		01-OCT-93	12-OCT-93	<	3.7	UGL
BNA'S IN WATER BY GC/MS		GCLDAN	ETKA		01-JUL-93	07-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		GCLDAN	ETNA		02-JUL-93	14-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		GCLDAN	IFDA		27-SEP-93	18-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		GCLDAN	IFEA		28-SEP-93	15-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		GCLDAN	IFGA		01-OCT-93	12-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		HCBD	ETKA		01-JUL-93	07-JUL-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		HCBD	ETNA		02-JUL-93	14-JUL-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		HCBD	IFDA		27-SEP-93	18-OCT-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		HCBD	IFEA		28-SEP-93	15-OCT-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		HCBD	IFGA		01-OCT-93	12-OCT-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS		HPCL	ETKA		01-JUL-93	07-JUL-93	<	2	UGL
BNA'S IN WATER BY GC/MS		HPCL	ETNA		02-JUL-93	14-JUL-93	<	2	UGL
BNA'S IN WATER BY GC/MS		HPCL	IFDA		27-SEP-93	18-OCT-93	<	2	UGL
BNA'S IN WATER BY GC/MS		HPCL	IFEA		28-SEP-93	15-OCT-93	<	2	UGL
BNA'S IN WATER BY GC/MS		HPCL	IFGA		01-OCT-93	12-OCT-93	<	2	UGL
BNA'S IN WATER BY GC/MS		HPCL	ETKA		01-JUL-93	07-JUL-93	<	5	UGL
BNA'S IN WATER BY GC/MS		HPCL	ETNA		02-JUL-93	14-JUL-93	<	5	UGL
BNA'S IN WATER BY GC/MS		HPCL	IFDA		27-SEP-93	18-OCT-93	<	5	UGL
BNA'S IN WATER BY GC/MS		HPCL	IFEA		28-SEP-93	15-OCT-93	<	5	UGL
BNA'S IN WATER BY GC/MS		HPCL	IFGA		01-OCT-93	12-OCT-93	<	5	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
BNA'S IN WATER BY GC/MS	UM18	ICDPYR	ETKA		01-JUL-93	07-JUL-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		ICDPYR	ETNA		02-JUL-93	14-JUL-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		ICDPYR	IFDA		27-SEP-93	18-OCT-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		ICDPYR	IFEA		28-SEP-93	15-OCT-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		ICDPYR	IFGA		01-OCT-93	12-OCT-93	<	8.6	UGL
BNA'S IN WATER BY GC/MS		ISOPHR	ETKA		01-JUL-93	07-JUL-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS		ISOPHR	ETNA		02-JUL-93	14-JUL-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS		ISOPHR	IFDA		27-SEP-93	18-OCT-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS		ISOPHR	IFEA		28-SEP-93	15-OCT-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS		ISOPHR	IFGA		01-OCT-93	12-OCT-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS		LIN	ETKA		01-JUL-93	07-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		LIN	ETNA		02-JUL-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS		LIN	IFDA		27-SEP-93	18-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		LIN	IFEA		28-SEP-93	15-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		LIN	IFGA		01-OCT-93	12-OCT-93	<	4	UGL
BNA'S IN WATER BY GC/MS		MEXCLR	ETKA		01-JUL-93	07-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		MEXCLR	ETNA		02-JUL-93	14-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		MEXCLR	IFDA		27-SEP-93	18-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		MEXCLR	IFEA		28-SEP-93	15-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		MEXCLR	IFGA		01-OCT-93	12-OCT-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS		NAP	ETKA		01-JUL-93	07-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NAP	ETNA		02-JUL-93	14-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NAP	IFDA		27-SEP-93	18-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NAP	IFEA		28-SEP-93	15-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NAP	IFGA		01-OCT-93	12-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NB	ETKA		01-JUL-93	07-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NB	ETNA		02-JUL-93	14-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NB	IFDA		27-SEP-93	18-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NB	IFEA		28-SEP-93	15-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NB	IFGA		01-OCT-93	12-OCT-93	<	.5	UGL
BNA'S IN WATER BY GC/MS		NNDMEA	ETKA		01-JUL-93	07-JUL-93	<	2	UGL
BNA'S IN WATER BY GC/MS		NNDMEA	ETNA		02-JUL-93	14-JUL-93	<	2	UGL
BNA'S IN WATER BY GC/MS		NNDMEA	IFDA		27-SEP-93	18-OCT-93	<	2	UGL
BNA'S IN WATER BY GC/MS		NNDMEA	IFEA		28-SEP-93	15-OCT-93	<	2	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

USATHAMA Method Code	Method Description	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
LM18	BNA'S IN WATER BY GC/MS	NNDMEA	IFGA		01-OCT-93	12-OCT-93	2	UGL
	BNA'S IN WATER BY GC/MS	NNDNPA	ETNA		01-JUL-93	07-JUL-93	4.4	UGL
	BNA'S IN WATER BY GC/MS	NNDNPA	ETNA		02-JUL-93	14-JUL-93	4.4	UGL
	BNA'S IN WATER BY GC/MS	NNDNPA	IFDA		27-SEP-93	18-OCT-93	4.4	UGL
	BNA'S IN WATER BY GC/MS	NNDNPA	IFGA		28-SEP-93	15-OCT-93	4.4	UGL
	BNA'S IN WATER BY GC/MS	NNDNPA	IFGA		01-OCT-93	12-OCT-93	4.4	UGL
	BNA'S IN WATER BY GC/MS	NNDPA	ETKA		01-JUL-93	07-JUL-93	3	UGL
	BNA'S IN WATER BY GC/MS	NNDPA	ETNA		02-JUL-93	14-JUL-93	3	UGL
	BNA'S IN WATER BY GC/MS	NNDPA	IFDA		27-SEP-93	18-OCT-93	3	UGL
	BNA'S IN WATER BY GC/MS	NNDPA	IFGA		28-SEP-93	15-OCT-93	3	UGL
	BNA'S IN WATER BY GC/MS	NNDPA	IFGA		01-OCT-93	12-OCT-93	3	UGL
	BNA'S IN WATER BY GC/MS	PCB016	ETKA		01-JUL-93	07-JUL-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB016	ETNA		02-JUL-93	14-JUL-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB016	IFDA		27-SEP-93	18-OCT-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB016	IFGA		28-SEP-93	15-OCT-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB221	ETKA		01-JUL-93	07-JUL-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB221	ETNA		02-JUL-93	14-JUL-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB221	IFDA		27-SEP-93	18-OCT-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB221	IFGA		28-SEP-93	15-OCT-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB232	ETKA		01-JUL-93	07-JUL-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB232	ETNA		02-JUL-93	14-JUL-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB232	IFDA		27-SEP-93	18-OCT-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB232	IFGA		28-SEP-93	15-OCT-93	21	UGL
	BNA'S IN WATER BY GC/MS	PCB242	ETKA		01-JUL-93	07-JUL-93	30	UGL
	BNA'S IN WATER BY GC/MS	PCB242	ETNA		02-JUL-93	14-JUL-93	30	UGL
	BNA'S IN WATER BY GC/MS	PCB242	IFDA		27-SEP-93	18-OCT-93	30	UGL
	BNA'S IN WATER BY GC/MS	PCB242	IFGA		28-SEP-93	15-OCT-93	30	UGL
	BNA'S IN WATER BY GC/MS	PCB248	ETKA		01-JUL-93	07-JUL-93	30	UGL
	BNA'S IN WATER BY GC/MS	PCB248	ETNA		02-JUL-93	14-JUL-93	30	UGL
	BNA'S IN WATER BY GC/MS	PCB248	IFDA		27-SEP-93	18-OCT-93	30	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
BNA'S IN WATER BY GC/MS	UM18	PCB248	IFEA		28-SEP-93	15-OCT-93	<	30 UGL
BNA'S IN WATER BY GC/MS		PCB248	IFGA		01-OCT-93	12-OCT-93	<	30 UGL
BNA'S IN WATER BY GC/MS		PCB254	ETKA		01-JUL-93	07-JUL-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB254	ETNA		02-JUL-93	14-JUL-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB254	IFDA		27-SEP-93	18-OCT-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB254	IFEA		28-SEP-93	15-OCT-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB254	IFGA		01-OCT-93	12-OCT-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB260	ETKA		01-JUL-93	07-JUL-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB260	ETNA		02-JUL-93	14-JUL-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB260	IFDA		27-SEP-93	18-OCT-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB260	IFEA		28-SEP-93	15-OCT-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCB260	IFGA		01-OCT-93	12-OCT-93	<	36 UGL
BNA'S IN WATER BY GC/MS		PCP	ETKA		01-JUL-93	07-JUL-93	<	18 UGL
BNA'S IN WATER BY GC/MS		PCP	ETNA		02-JUL-93	14-JUL-93	<	18 UGL
BNA'S IN WATER BY GC/MS		PCP	IFDA		27-SEP-93	18-OCT-93	<	18 UGL
BNA'S IN WATER BY GC/MS		PCP	IFEA		28-SEP-93	15-OCT-93	<	18 UGL
BNA'S IN WATER BY GC/MS		PCP	IFGA		01-OCT-93	12-OCT-93	<	18 UGL
BNA'S IN WATER BY GC/MS		PHANTR	ETKA		01-JUL-93	07-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		PHANTR	ETNA		02-JUL-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		PHANTR	IFDA		27-SEP-93	18-OCT-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		PHANTR	IFEA		28-SEP-93	15-OCT-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		PHANTR	IFGA		01-OCT-93	12-OCT-93	<	.5 UGL
BNA'S IN WATER BY GC/MS		PHENOL	ETKA		01-JUL-93	07-JUL-93	<	9.2 UGL
BNA'S IN WATER BY GC/MS		PHENOL	ETNA		02-JUL-93	14-JUL-93	<	9.2 UGL
BNA'S IN WATER BY GC/MS		PHENOL	IFDA		27-SEP-93	18-OCT-93	<	9.2 UGL
BNA'S IN WATER BY GC/MS		PHENOL	IFEA		28-SEP-93	15-OCT-93	<	9.2 UGL
BNA'S IN WATER BY GC/MS		PHENOL	IFGA		01-OCT-93	12-OCT-93	<	9.2 UGL
BNA'S IN WATER BY GC/MS		PPDD	ETKA		01-JUL-93	07-JUL-93	<	4 UGL
BNA'S IN WATER BY GC/MS		PPDD	ETNA		02-JUL-93	14-JUL-93	<	4 UGL
BNA'S IN WATER BY GC/MS		PPDD	IFDA		27-SEP-93	18-OCT-93	<	4 UGL
BNA'S IN WATER BY GC/MS		PPDD	IFEA		28-SEP-93	15-OCT-93	<	4 UGL
BNA'S IN WATER BY GC/MS		PPDD	IFGA		01-OCT-93	12-OCT-93	<	4 UGL
BNA'S IN WATER BY GC/MS		PPDE	ETKA		01-JUL-93	07-JUL-93	<	4.7 UGL
BNA'S IN WATER BY GC/MS		PPDE	ETNA		02-JUL-93	14-JUL-93	<	4.7 UGL

Table ES-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

USATHANA		Method	Test	Lot	Lab	Prep	Analysis	Value Units	
Method Code	Method Description	Name	Number	Date	Date	Date	Date		
UM18	BNA'S IN WATER BY GC/MS	PPDDE	IFDA	27-SEP-93	18-OCT-93	<	<	4.7	UGL
	BNA'S IN WATER BY GC/MS	PPDDE	IFEA	28-SEP-93	15-OCT-93	<	<	4.7	UGL
	BNA'S IN WATER BY GC/MS	PPDDE	IFGA	01-OCT-93	12-OCT-93	<	<	4.7	UGL
	BNA'S IN WATER BY GC/MS	PPDDT	ETKA	01-JUL-93	07-JUL-93	<	<	9.2	UGL
	BNA'S IN WATER BY GC/MS	PPDDT	ETNA	02-JUL-93	14-JUL-93	<	<	9.2	UGL
	BNA'S IN WATER BY GC/MS	PPDDT	IFDA	27-SEP-93	18-OCT-93	<	<	9.2	UGL
	BNA'S IN WATER BY GC/MS	PPDDT	IFEA	28-SEP-93	15-OCT-93	<	<	9.2	UGL
	BNA'S IN WATER BY GC/MS	PPDDT	IFGA	01-OCT-93	12-OCT-93	<	<	9.2	UGL
	BNA'S IN WATER BY GC/MS	PYR	ETKA	01-JUL-93	07-JUL-93	<	<	2.8	UGL
	BNA'S IN WATER BY GC/MS	PYR	ETNA	02-JUL-93	14-JUL-93	<	<	2.8	UGL
	BNA'S IN WATER BY GC/MS	PYR	IFDA	27-SEP-93	18-OCT-93	<	<	2.8	UGL
	BNA'S IN WATER BY GC/MS	PYR	IFEA	28-SEP-93	15-OCT-93	<	<	2.8	UGL
	BNA'S IN WATER BY GC/MS	PYR	IFGA	01-OCT-93	12-OCT-93	<	<	2.8	UGL
	BNA'S IN WATER BY GC/MS	TXPHEN	ETKA	01-JUL-93	07-JUL-93	<	<	36	UGL
	BNA'S IN WATER BY GC/MS	TXPHEN	ETNA	02-JUL-93	14-JUL-93	<	<	36	UGL
	BNA'S IN WATER BY GC/MS	TXPHEN	IFDA	27-SEP-93	18-OCT-93	<	<	36	UGL
	BNA'S IN WATER BY GC/MS	TXPHEN	IFEA	28-SEP-93	15-OCT-93	<	<	36	UGL
	BNA'S IN WATER BY GC/MS	TXPHEN	IFGA	01-OCT-93	12-OCT-93	<	<	36	UGL
UM20	VOC'S IN WATER BY GC/MS	111TCE	FGEA	28-JUN-93	28-JUN-93	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	FGGA	30-JUN-93	30-JUN-93	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	ICFA	27-SEP-93	27-SEP-93	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	ICGA	28-SEP-93	28-SEP-93	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	XDRG	08-FEB-95	08-FEB-95	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	XDSG	10-FEB-95	10-FEB-95	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	XDSG	10-FEB-95	10-FEB-95	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	XDOE	10-OCT-94	10-OCT-94	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	111TCE	XOME	12-OCT-94	12-OCT-94	<	<	.5	UGL
	VOC'S IN WATER BY GC/MS	112TCE	FGEA	28-JUN-93	28-JUN-93	<	<	1.2	UGL
	VOC'S IN WATER BY GC/MS	112TCE	FGGA	30-JUN-93	30-JUN-93	<	<	1.2	UGL
	VOC'S IN WATER BY GC/MS	112TCE	ICFA	27-SEP-93	27-SEP-93	<	<	1.2	UGL
	VOC'S IN WATER BY GC/MS	112TCE	ICGA	28-SEP-93	28-SEP-93	<	<	1.2	UGL
	VOC'S IN WATER BY GC/MS	112TCE	XDRG	08-FEB-95	08-FEB-95	<	<	1.2	UGL
	VOC'S IN WATER BY GC/MS	112TCE	XDSG	10-FEB-95	10-FEB-95	<	<	1.2	UGL
	VOC'S IN WATER BY GC/MS	112TCE	XDSG	10-FEB-95	10-FEB-95	<	<	1.2	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
VOC'S IN WATER BY GC/MS	UM20	112TCE	XDSG		10-FEB-95	10-FEB-95	<	1.2	UGL
VOC'S IN WATER BY GC/MS		112TCE	XDVE		10-OCT-94	10-OCT-94	<	1.2	UGL
VOC'S IN WATER BY GC/MS		112TCE	XDWE		12-OCT-94	12-OCT-94	<	1.2	UGL
VOC'S IN WATER BY GC/MS		11DCE	FGEA		28-JUN-93	28-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDVE		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDWE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		11DCE	FGEA		28-JUN-93	28-JUN-93	<	.68	UGL
VOC'S IN WATER BY GC/MS		11DCE	FGGA		30-JUN-93	30-JUN-93	<	.68	UGL
VOC'S IN WATER BY GC/MS		11DCE	ICFA		27-SEP-93	27-SEP-93	<	.68	UGL
VOC'S IN WATER BY GC/MS		11DCE	ICGA		28-SEP-93	28-SEP-93	<	.68	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDRG		08-FEB-95	08-FEB-95	<	.68	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDSG		10-FEB-95	10-FEB-95	<	.68	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDVE		10-OCT-94	10-OCT-94	<	.68	UGL
VOC'S IN WATER BY GC/MS		11DCE	XDWE		10-OCT-94	10-OCT-94	<	.68	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGEA		28-JUN-93	28-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDVE		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDWE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGEA		28-JUN-93	28-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDVE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDWE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGEA		28-JUN-93	28-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDVE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	XDWE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGEA		28-JUN-93	28-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		12DCE	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL

METHOD BLANKS

USATHAMMA Method Code	Method Description	Test Name	Lab		Prep Date	Analysis Date	Value	Units	
			Lot	Number					
UM20	VOC'S IN WATER BY GC/MS	12DCLE	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCLE	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCLE	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCLE	XDVE		10-OCT-94	10-OCT-94	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCLE	XDWE		12-OCT-94	12-OCT-94	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	FGEA		28-JUN-93	28-JUN-93	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	XDVE		10-OCT-94	10-OCT-94	<	.5	UGL
	VOC'S IN WATER BY GC/MS	12DCPL	XDWE		12-OCT-94	12-OCT-94	<	.5	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	FGEA		28-JUN-93	28-JUN-93	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	FGGA		30-JUN-93	30-JUN-93	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	ICFA		27-SEP-93	27-SEP-93	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	ICGA		28-SEP-93	28-SEP-93	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	XDRG		08-FEB-95	08-FEB-95	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	XDSG		10-FEB-95	10-FEB-95	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	XDSG		10-FEB-95	10-FEB-95	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	XDVE		10-OCT-94	10-OCT-94	<	.71	UGL
	VOC'S IN WATER BY GC/MS	2CLEVE	XDWE		12-OCT-94	12-OCT-94	<	.71	UGL
	VOC'S IN WATER BY GC/MS	ACET	FGEA		28-JUN-93	28-JUN-93	<	13	UGL
	VOC'S IN WATER BY GC/MS	ACET	FGGA		30-JUN-93	30-JUN-93	<	13	UGL
	VOC'S IN WATER BY GC/MS	ACET	ICFA		27-SEP-93	27-SEP-93	<	18	UGL
	VOC'S IN WATER BY GC/MS	ACET	ICGA		28-SEP-93	28-SEP-93	<	13	UGL
	VOC'S IN WATER BY GC/MS	ACET	XDRG		08-FEB-95	08-FEB-95	<	13	UGL
	VOC'S IN WATER BY GC/MS	ACET	XDSG		10-FEB-95	10-FEB-95	<	13	UGL
	VOC'S IN WATER BY GC/MS	ACET	XDSG		10-FEB-95	10-FEB-95	<	13	UGL
	VOC'S IN WATER BY GC/MS	ACET	XDVE		10-OCT-94	10-OCT-94	<	13	UGL
	VOC'S IN WATER BY GC/MS	ACET	XDWE		12-OCT-94	12-OCT-94	<	13	UGL
VOC'S IN WATER BY GC/MS	ACROLN	FGEA		28-JUN-93	28-JUN-93	<	100	UGL	
VOC'S IN WATER BY GC/MS	ACROLN	FGGA		30-JUN-93	30-JUN-93	<	100	UGL	

Table FS-1
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Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
VOC'S IN WATER BY GC/MS	UM20	ACROLN	ICFA		27-SEP-93	27-SEP-93	<	100	UGL
VOC'S IN WATER BY GC/MS		ACROLN	ICGA		28-SEP-93	28-SEP-93	<	100	UGL
VOC'S IN WATER BY GC/MS		ACROLN	XDRG		08-FEB-95	08-FEB-95	<	100	UGL
VOC'S IN WATER BY GC/MS		ACROLN	XDGG		10-FEB-95	10-FEB-95	<	100	UGL
VOC'S IN WATER BY GC/MS		ACROLN	XDGG		10-FEB-95	10-FEB-95	<	100	UGL
VOC'S IN WATER BY GC/MS		ACROLN	XDVE		10-OCT-94	10-OCT-94	<	100	UGL
VOC'S IN WATER BY GC/MS		ACROLN	XDWE		12-OCT-94	12-OCT-94	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	FGGA		28-JUN-93	28-JUN-93	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	FGGA		30-JUN-93	30-JUN-93	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	ICFA		27-SEP-93	27-SEP-93	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	ICGA		28-SEP-93	28-SEP-93	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	XDRG		08-FEB-95	08-FEB-95	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	XDGG		10-FEB-95	10-FEB-95	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	XDGG		10-FEB-95	10-FEB-95	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	XDVE		10-OCT-94	10-OCT-94	<	100	UGL
VOC'S IN WATER BY GC/MS		ACRYLO	XDWE		12-OCT-94	12-OCT-94	<	100	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	FGGA		28-JUN-93	28-JUN-93	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	FGGA		30-JUN-93	30-JUN-93	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	ICFA		27-SEP-93	27-SEP-93	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	ICGA		28-SEP-93	28-SEP-93	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	XDRG		08-FEB-95	08-FEB-95	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	XDGG		10-FEB-95	10-FEB-95	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	XDGG		10-FEB-95	10-FEB-95	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	XDVE		10-OCT-94	10-OCT-94	<	.59	UGL
VOC'S IN WATER BY GC/MS		BRDCLM	XDWE		12-OCT-94	12-OCT-94	<	.59	UGL
VOC'S IN WATER BY GC/MS		C130CP	FGGA		28-JUN-93	28-JUN-93	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	FGGA		30-JUN-93	30-JUN-93	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	ICFA		27-SEP-93	27-SEP-93	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	ICGA		28-SEP-93	28-SEP-93	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	XDRG		08-FEB-95	08-FEB-95	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	XDGG		10-FEB-95	10-FEB-95	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	XDGG		10-FEB-95	10-FEB-95	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	XDVE		10-OCT-94	10-OCT-94	<	.58	UGL
VOC'S IN WATER BY GC/MS		C130CP	XDWE		12-OCT-94	12-OCT-94	<	.58	UGL

METHOD BLANKS

USATHAMMA		Test Method Code	Method Description	Lab Number	Prep Date	Analysis Date	Value	Units
UM20	VOC'S IN WATER BY GC/MS	C2AVE	FGGA	28-JUN-93	<	28-JUN-93	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	FGGA	30-JUN-93	<	30-JUN-93	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	ICFA	27-SEP-93	<	27-SEP-93	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	ICGA	28-SEP-93	<	28-SEP-93	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	XDRG	08-FEB-95	<	08-FEB-95	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	XDSG	10-FEB-95	<	10-FEB-95	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	XDSG	10-FEB-95	<	10-FEB-95	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	XDVE	10-OCT-94	<	10-OCT-94	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2AVE	XDVE	12-OCT-94	<	12-OCT-94	8.3	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	FGGA	28-JUN-93	<	28-JUN-93	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	FGGA	30-JUN-93	<	30-JUN-93	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	ICFA	27-SEP-93	<	27-SEP-93	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	ICGA	28-SEP-93	<	28-SEP-93	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	XDRG	08-FEB-95	<	08-FEB-95	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	XDSG	10-FEB-95	<	10-FEB-95	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	XDSG	10-FEB-95	<	10-FEB-95	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H3CL	XDVE	10-OCT-94	<	10-OCT-94	2.6	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	FGGA	28-JUN-93	<	28-JUN-93	1.9	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	FGGA	30-JUN-93	<	30-JUN-93	1.9	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	ICFA	27-SEP-93	<	27-SEP-93	1.9	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	ICGA	28-SEP-93	<	28-SEP-93	1.9	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	XDRG	08-FEB-95	<	08-FEB-95	1.9	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	XDSG	10-FEB-95	<	10-FEB-95	1.9	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	XDSG	10-FEB-95	<	10-FEB-95	1.9	UGL
	VOC'S IN WATER BY GC/MS	C2H5CL	XDVE	10-OCT-94	<	10-OCT-94	1.9	UGL
	VOC'S IN WATER BY GC/MS	C6H6	FGGA	28-JUN-93	<	28-JUN-93	.5	UGL
	VOC'S IN WATER BY GC/MS	C6H6	FGGA	30-JUN-93	<	30-JUN-93	.5	UGL
	VOC'S IN WATER BY GC/MS	C6H6	ICFA	27-SEP-93	<	27-SEP-93	.5	UGL
	VOC'S IN WATER BY GC/MS	C6H6	ICGA	28-SEP-93	<	28-SEP-93	.5	UGL
	VOC'S IN WATER BY GC/MS	C6H6	XDRG	08-FEB-95	<	08-FEB-95	.5	UGL
	VOC'S IN WATER BY GC/MS	C6H6	XDSG	10-FEB-95	<	10-FEB-95	.5	UGL
	VOC'S IN WATER BY GC/MS	C6H6	XDSG	10-FEB-95	<	10-FEB-95	.5	UGL

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USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
LM20	COH6	XDVE		10-OCT-94	10-OCT-94	<	.5 UGL
	COH6	XDWE		12-OCT-94	12-OCT-94	<	.5 UGL
	CCL3F	FGGA		28-JUN-93	28-JUN-93	<	1.4 UGL
	CCL3F	FGGA		30-JUN-93	30-JUN-93	<	1.4 UGL
	CCL3F	ICFA		27-SEP-93	27-SEP-93	<	1.4 UGL
	CCL3F	ICGA		28-SEP-93	28-SEP-93	<	1.4 UGL
	CCL3F	XDRG		08-FEB-95	08-FEB-95	<	1.4 UGL
	CCL3F	XDSG		10-FEB-95	10-FEB-95	<	1.4 UGL
	CCL3F	XDSG		10-FEB-95	10-FEB-95	<	1.4 UGL
	CCL3F	XDVE		10-OCT-94	10-OCT-94	<	1.4 UGL
	CCL3F	XDWE		12-OCT-94	12-OCT-94	<	1.4 UGL
	CCL4	FGGA		28-JUN-93	28-JUN-93	<	.58 UGL
	CCL4	FGGA		30-JUN-93	30-JUN-93	<	.58 UGL
	CCL4	ICFA		27-SEP-93	27-SEP-93	<	.58 UGL
	CCL4	ICGA		28-SEP-93	28-SEP-93	<	.58 UGL
	CCL4	XDRG		08-FEB-95	08-FEB-95	<	.58 UGL
	CCL4	XDSG		10-FEB-95	10-FEB-95	<	.58 UGL
	CCL4	XDSG		10-FEB-95	10-FEB-95	<	.58 UGL
	CCL4	XDVE		10-OCT-94	10-OCT-94	<	.58 UGL
	CCL4	XDWE		12-OCT-94	12-OCT-94	<	.58 UGL
	CH2CL2	FGGA		28-JUN-93	28-JUN-93	<	2.3 UGL
	CH2CL2	FGGA		30-JUN-93	30-JUN-93	<	2.3 UGL
	CH2CL2	ICFA		27-SEP-93	27-SEP-93	<	2.3 UGL
	CH2CL2	ICGA		28-SEP-93	28-SEP-93	<	2.3 UGL
	CH2CL2	XDRG		08-FEB-95	08-FEB-95	<	2.3 UGL
	CH2CL2	XDSG		10-FEB-95	10-FEB-95	<	2.3 UGL
	CH2CL2	XDSG		10-FEB-95	10-FEB-95	<	2.3 UGL
	CH2CL2	XDVE		10-OCT-94	10-OCT-94	<	2.3 UGL
	CH2CL2	XDWE		12-OCT-94	12-OCT-94	<	2.3 UGL
	CH3BR	FGGA		28-JUN-93	28-JUN-93	<	5.8 UGL
	CH3BR	FGGA		30-JUN-93	30-JUN-93	<	5.8 UGL
	CH3BR	ICFA		27-SEP-93	27-SEP-93	<	5.8 UGL
	CH3BR	ICGA		28-SEP-93	28-SEP-93	<	5.8 UGL
	CH3BR	XDRG		08-FEB-95	08-FEB-95	<	5.8 UGL

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METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
VOC'S IN WATER BY GC/MS	UM20	CH3BR	XDSG		10-FEB-95	10-FEB-95	<	5.8	UGL
VOC'S IN WATER BY GC/MS		CH3BR	XDSG		10-FEB-95	10-FEB-95	<	5.8	UGL
VOC'S IN WATER BY GC/MS		CH3BR	XDVE		10-OCT-94	10-OCT-94	<	5.8	UGL
VOC'S IN WATER BY GC/MS		CH3BR	XDME		12-OCT-94	12-OCT-94	<	5.8	UGL
VOC'S IN WATER BY GC/MS		CH3CL	FGGA		28-JUN-93	28-JUN-93	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	FGGA		30-JUN-93	30-JUN-93	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	ICFA		27-SEP-93	27-SEP-93	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	ICGA		28-SEP-93	28-SEP-93	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	XDRG		08-FEB-95	08-FEB-95	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	XDSG		10-FEB-95	10-FEB-95	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	XDSG		10-FEB-95	10-FEB-95	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	XDVE		10-OCT-94	10-OCT-94	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CH3CL	XDME		12-OCT-94	12-OCT-94	<	3.2	UGL
VOC'S IN WATER BY GC/MS		CHBR3	FGGA		28-JUN-93	28-JUN-93	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHBR3	FGGA		30-JUN-93	30-JUN-93	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHBR3	ICFA		27-SEP-93	27-SEP-93	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHBR3	ICGA		28-SEP-93	28-SEP-93	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHBR3	XDRG		08-FEB-95	08-FEB-95	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHBR3	XDSG		10-FEB-95	10-FEB-95	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHBR3	XDSG		10-FEB-95	10-FEB-95	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHBR3	XDVE		10-OCT-94	10-OCT-94	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHCL3	XDME		12-OCT-94	12-OCT-94	<	2.6	UGL
VOC'S IN WATER BY GC/MS		CHCL3	FGGA		28-JUN-93	28-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	XDVE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		CHCL3	XDME		12-OCT-94	12-OCT-94	<	.73	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	FGGA		28-JUN-93	28-JUN-93	<	10	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	FGGA		30-JUN-93	30-JUN-93	<	10	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	ICFA		27-SEP-93	27-SEP-93	<	10	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	
							Value	Units
VOC'S IN WATER BY GC/MS	UM20	CL2BZ	ICGA		28-SEP-93	28-SEP-93	10	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	XDRG		08-FEB-95	08-FEB-95	10	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	XDSG		10-FEB-95	10-FEB-95	10	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	XDSG		10-FEB-95	10-FEB-95	10	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	XDVE		10-OCT-94	10-OCT-94	10	UGL
VOC'S IN WATER BY GC/MS		CL2BZ	XDVE		12-OCT-94	12-OCT-94	10	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	FGEA		28-JUN-93	28-JUN-93	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	FGGA		30-JUN-93	30-JUN-93	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	ICFA		27-SEP-93	27-SEP-93	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	ICGA		28-SEP-93	28-SEP-93	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	XDRG		08-FEB-95	08-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	XDSG		10-FEB-95	10-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	XDSG		10-FEB-95	10-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	XDVE		10-OCT-94	10-OCT-94	.5	UGL
VOC'S IN WATER BY GC/MS		CLC6H5	XDVE		12-OCT-94	12-OCT-94	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	FGEA		28-JUN-93	28-JUN-93	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	FGGA		30-JUN-93	30-JUN-93	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	ICFA		27-SEP-93	27-SEP-93	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	ICGA		28-SEP-93	28-SEP-93	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	XDRG		08-FEB-95	08-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	XDSG		10-FEB-95	10-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	XDSG		10-FEB-95	10-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	XDVE		10-OCT-94	10-OCT-94	.5	UGL
VOC'S IN WATER BY GC/MS		CS2	XDVE		12-OCT-94	12-OCT-94	.5	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	FGEA		28-JUN-93	28-JUN-93	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	FGGA		30-JUN-93	30-JUN-93	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	ICFA		27-SEP-93	27-SEP-93	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	ICGA		28-SEP-93	28-SEP-93	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	XDRG		08-FEB-95	08-FEB-95	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	XDSG		10-FEB-95	10-FEB-95	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	XDSG		10-FEB-95	10-FEB-95	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	XDVE		10-OCT-94	10-OCT-94	.67	UGL
VOC'S IN WATER BY GC/MS		DBRCLM	XDVE		12-OCT-94	12-OCT-94	.67	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	FGEA		28-JUN-93	28-JUN-93	.5	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	<	Value	Units
VOC'S IN WATER BY GC/MS	UM20	ETC6H5	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	XDOVE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		ETC6H5	XDOVE		12-OCT-94	12-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	FGGA		28-JUN-93	28-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	FGGA		30-JUN-93	30-JUN-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	ICFA		27-SEP-93	27-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	ICGA		28-SEP-93	28-SEP-93	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	XDRG		08-FEB-95	08-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	XDSG		10-FEB-95	10-FEB-95	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	XDOVE		10-OCT-94	10-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEC6H5	XDOVE		12-OCT-94	12-OCT-94	<	.5	UGL
VOC'S IN WATER BY GC/MS		MEK	FGGA		28-JUN-93	28-JUN-93	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MEK	ICFA		30-JUN-93	30-JUN-93	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MEK	ICGA		27-SEP-93	27-SEP-93	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MEK	XDRG		28-SEP-93	28-SEP-93	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MEK	XDSG		08-FEB-95	08-FEB-95	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MEK	XDSG		10-FEB-95	10-FEB-95	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MEK	XDOVE		10-OCT-94	10-OCT-94	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MEK	XDOVE		12-OCT-94	12-OCT-94	<	6.4	UGL
VOC'S IN WATER BY GC/MS		MIK	FGGA		28-JUN-93	28-JUN-93	<	3	UGL
VOC'S IN WATER BY GC/MS		MIK	ICFA		30-JUN-93	30-JUN-93	<	3	UGL
VOC'S IN WATER BY GC/MS		MIK	ICGA		27-SEP-93	27-SEP-93	<	3	UGL
VOC'S IN WATER BY GC/MS		MIK	XDRG		28-SEP-93	28-SEP-93	<	3	UGL
VOC'S IN WATER BY GC/MS		MIK	XDSG		08-FEB-95	08-FEB-95	<	3	UGL
VOC'S IN WATER BY GC/MS		MIK	XDSG		10-FEB-95	10-FEB-95	<	3	UGL
VOC'S IN WATER BY GC/MS		MIK	XDOVE		10-FEB-95	10-FEB-95	<	3	UGL
VOC'S IN WATER BY GC/MS		MIK	XDOVE		10-OCT-94	10-OCT-94	<	3	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

METHOD BLANKS

Method Description	USATHAWA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value	Units
VOC'S IN WATER BY GC/MS	UM20	MBK	XDWE		12-OCT-94	12-OCT-94	3	UGL
VOC'S IN WATER BY GC/MS		MBK	FGEA		28-JUN-93	28-JUN-93	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	FGGA		30-JUN-93	30-JUN-93	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	ICFA		27-SEP-93	27-SEP-93	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	ICGA		28-SEP-93	28-SEP-93	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	XDRG		08-FEB-95	08-FEB-95	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	XDVG		10-FEB-95	10-FEB-95	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	XDVG		10-FEB-95	10-FEB-95	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	XDVE		10-OCT-94	10-OCT-94	3.6	UGL
VOC'S IN WATER BY GC/MS		MBK	XDWE		12-OCT-94	12-OCT-94	3.6	UGL
VOC'S IN WATER BY GC/MS		STYR	FGEA		28-JUN-93	28-JUN-93	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	FGGA		30-JUN-93	30-JUN-93	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	ICFA		27-SEP-93	27-SEP-93	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	ICGA		28-SEP-93	28-SEP-93	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	XDRG		08-FEB-95	08-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	XDVG		10-FEB-95	10-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	XDVG		10-FEB-95	10-FEB-95	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	XDVE		10-OCT-94	10-OCT-94	.5	UGL
VOC'S IN WATER BY GC/MS		STYR	XDWE		12-OCT-94	12-OCT-94	.5	UGL
VOC'S IN WATER BY GC/MS		T13DCP	FGEA		28-JUN-93	28-JUN-93	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	FGGA		30-JUN-93	30-JUN-93	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	ICFA		27-SEP-93	27-SEP-93	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	ICGA		28-SEP-93	28-SEP-93	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	XDRG		08-FEB-95	08-FEB-95	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	XDVG		10-FEB-95	10-FEB-95	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	XDVG		10-FEB-95	10-FEB-95	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	XDVE		10-OCT-94	10-OCT-94	.7	UGL
VOC'S IN WATER BY GC/MS		T13DCP	XDWE		12-OCT-94	12-OCT-94	.7	UGL
VOC'S IN WATER BY GC/MS		TCLEA	FGEA		28-JUN-93	28-JUN-93	.51	UGL
VOC'S IN WATER BY GC/MS		TCLEA	FGGA		30-JUN-93	30-JUN-93	.51	UGL
VOC'S IN WATER BY GC/MS		TCLEA	ICFA		27-SEP-93	27-SEP-93	.51	UGL
VOC'S IN WATER BY GC/MS		TCLEA	ICGA		28-SEP-93	28-SEP-93	.51	UGL
VOC'S IN WATER BY GC/MS		TCLEA	XDRG		08-FEB-95	08-FEB-95	.51	UGL
VOC'S IN WATER BY GC/MS		TCLEA	XDVG		10-FEB-95	10-FEB-95	.51	UGL

Table FS-1
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6
METHOD BLANKS

Method Description	USATHAMA Method Code	Test Name	Lot	Lab Number	Prep Date	Analysis Date	Value Units
VOC'S IN WATER BY GC/MS	LM20	TCLEA	XDSG		10-FEB-95	10-FEB-95	<
VOC'S IN WATER BY GC/MS		TCLEA	XDVE		10-OCT-94	10-OCT-94	<
VOC'S IN WATER BY GC/MS		TCLEA	XDME		12-OCT-94	12-OCT-94	<
VOC'S IN WATER BY GC/MS		TCLEE	FGGA		28-JUN-93	28-JUN-93	<
VOC'S IN WATER BY GC/MS		TCLEE	FGGA		30-JUN-93	30-JUN-93	<
VOC'S IN WATER BY GC/MS		TCLEE	ICFA		27-SEP-93	27-SEP-93	<
VOC'S IN WATER BY GC/MS		TCLEE	ICGA		28-SEP-93	28-SEP-93	<
VOC'S IN WATER BY GC/MS		TCLEE	XDRG		08-FEB-95	08-FEB-95	<
VOC'S IN WATER BY GC/MS		TCLEE	XDSG		10-FEB-95	10-FEB-95	<
VOC'S IN WATER BY GC/MS		TCLEE	XDSG		10-FEB-95	10-FEB-95	<
VOC'S IN WATER BY GC/MS		TCLEE	XDVE		10-OCT-94	10-OCT-94	<
VOC'S IN WATER BY GC/MS		TCLEE	XDME		12-OCT-94	12-OCT-94	<
VOC'S IN WATER BY GC/MS		TRCLE	FGGA		28-JUN-93	28-JUN-93	<
VOC'S IN WATER BY GC/MS		TRCLE	FGGA		30-JUN-93	30-JUN-93	<
VOC'S IN WATER BY GC/MS		TRCLE	ICFA		27-SEP-93	27-SEP-93	<
VOC'S IN WATER BY GC/MS		TRCLE	ICGA		28-SEP-93	28-SEP-93	<
VOC'S IN WATER BY GC/MS		TRCLE	XDRG		08-FEB-95	08-FEB-95	<
VOC'S IN WATER BY GC/MS		TRCLE	XDSG		10-FEB-95	10-FEB-95	<
VOC'S IN WATER BY GC/MS		TRCLE	XDSG		10-FEB-95	10-FEB-95	<
VOC'S IN WATER BY GC/MS		TRCLE	XDVE		10-OCT-94	10-OCT-94	<
VOC'S IN WATER BY GC/MS		TRCLE	XDME		12-OCT-94	12-OCT-94	<
VOC'S IN WATER BY GC/MS		XYLEN	FGGA		28-JUN-93	28-JUN-93	<
VOC'S IN WATER BY GC/MS		XYLEN	FGGA		30-JUN-93	30-JUN-93	<
VOC'S IN WATER BY GC/MS		XYLEN	ICFA		27-SEP-93	27-SEP-93	<
VOC'S IN WATER BY GC/MS		XYLEN	ICGA		28-SEP-93	28-SEP-93	<
VOC'S IN WATER BY GC/MS		XYLEN	XDRG		08-FEB-95	08-FEB-95	<
VOC'S IN WATER BY GC/MS		XYLEN	XDSG		10-FEB-95	10-FEB-95	<
VOC'S IN WATER BY GC/MS		XYLEN	XDSG		10-FEB-95	10-FEB-95	<
VOC'S IN WATER BY GC/MS		XYLEN	XDVE		10-OCT-94	10-OCT-94	<
VOC'S IN WATER BY GC/MS		XYLEN	XDME		12-OCT-94	12-OCT-94	<

sal> spool off

TABLE FS-2
SUMMARY OF ANALYTES DETECTED IN QUALITY CONTROL SAMPLES
SUPPLEMENTAL SITE INVESTIGATION
GROUPS 3,5 & 6
FORT DEVENS, MASSACHUSETTS

METHOD BLANKS

Analysis	Frequency of Detection	Minimum Detection	Maximum Detection
Soil ug/g			
<u>VOCs</u>			
Trifluorochloromethane	2:7	0.017	0.03
Toluene	1:7	0.00086	0.00086
<u>SVOCs</u>			
Diethyl phthalate	1:2	0.27	0.27
<u>PCBs</u>			
	0:1	-	-
<u>Inorganics</u>			
Lead	3:4	0.426	0.755
<u>Miscellaneous</u>			
Total Organic Carbon	0:3	-	-
Total Petroleum Hydrocarbons	0:4	-	-
Aqueous ug/L			
<u>VOCs</u>			
Acetone	1:9	18	18
Chloroform	1:9	0.73	0.73
<u>SVOCs</u>			
Bis(2-ethylhexyl)phthalate	2:5	5.1	6.2
<u>Inorganics</u>			
	0:2	-	-
<u>Miscellaneous</u>			
Alkalinity	0:2	-	-
Bicarbonate	0:3	-	-
Hardness	0:1	-	-
Total Petroleum Hydrocarbons	0:3	-	-
Total Suspended Solids	0:3	-	-

Notes:

ug/L = Microgram per liter

ug/g = Microgram per gram

VOCs = Volatile Organic Compounds

SVOCs = Semivolatile Organic Compounds

- = No detections above associated CRL

PCBs = Polychlorinated Biphenyls

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDWIS Field		Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDWIS Site ID
			Sample Number	Field								
JUN20	DYIA	111TCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057	
	DYIA	112TCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	1.2	UGL	TRP-93-057	
	DYIA	11DCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057	
	DYIA	11DCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.68	UGL	TRP-93-057	
	DYIA	12DCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057	
	DYIA	12DCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057	
	DYIA	12DCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057	
	DYIA	12DCE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.71	UGL	TRP-93-057	
	DYIA	2CLEVE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.13	UGL	TRP-93-057	
	DYIA	ACET	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	100	UGL	TRP-93-057	
	DYIA	ACRYLO	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	100	UGL	TRP-93-057	
	DYIA	ACRYLO	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.59	UGL	TRP-93-057	
	DYIA	BRDCLM	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.58	UGL	TRP-93-057	
	DYIA	32DCP	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	8.3	UGL	TRP-93-057	
	DYIA	C2AVE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	2.6	UGL	TRP-93-057	
	DYIA	C2H3CL	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	1.9	UGL	TRP-93-057	
	DYIA	C2H5CL	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057	
	DYIA	C6H6	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	1.4	UGL	TRP-93-057	
	DYIA	CCL3F	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.58	UGL	TRP-93-057	
	DYIA	CCL4	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	2.3	UGL	TRP-93-057	
DYIA	CH2CL2	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	5.8	UGL	TRP-93-057		
DYIA	CH3BR	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	3.2	UGL	TRP-93-057		
DYIA	CH3CL	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	2.6	UGL	TRP-93-057		
DYIA	CHBR3	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.61	UGL	TRP-93-057		
DYIA	CHCL3	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	10	UGL	TRP-93-057		
DYIA	CL2B2	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057		
DYIA	CLC6H5	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.67	UGL	TRP-93-057		
DYIA	CS2	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057		
DYIA	DBRCLM	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057		
DYIA	ETC6H5	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057		
DYIA	MEC6H5	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	6.4	UGL	TRP-93-057		
DYIA	MEK	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	3	UGL	TRP-93-057		
DYIA	MIBK	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	3.6	UGL	TRP-93-057		
DYIA	MNBK	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<					

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	DIYA	STYR	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057
	DIYA	T13DCP	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.7	UGL	TRP-93-057
	DIYA	TCLEA	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.51	UGL	TRP-93-057
	DIYA	TCLEE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	1.6	UGL	TRP-93-057
	DIYA	TRCLE	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.5	UGL	TRP-93-057
	DIYA	XYLEN	DVTRP057	DVTRP*57	04-JUN-93	11-JUN-93	11-JUN-93	<	.84	UGL	TRP-93-057
	DIYA	111TCE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DIYA	111TCE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DIYA	112TCE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	1.2	UGL	TRP-93-054
	DIYA	112TCE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	1.2	UGL	TRP-93-055
	DIYA	11DCE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DIYA	11DCE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DIYA	11DCE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.68	UGL	TRP-93-054
	DIYA	11DCE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.68	UGL	TRP-93-055
	DIYA	12DCE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DIYA	12DCE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DIYA	12DCE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DIYA	12DCE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DIYA	12DCLP	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DIYA	12DCLP	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DIYA	2CLEVE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.71	UGL	TRP-93-054
	DIYA	2CLEVE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.71	UGL	TRP-93-055
	DIYA	ACET	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	13	UGL	TRP-93-054
	DIYA	ACET	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	13	UGL	TRP-93-055
	DIYA	ACROLN	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	100	UGL	TRP-93-054
	DIYA	ACROLN	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	100	UGL	TRP-93-055
	DIYA	ACRYLO	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	100	UGL	TRP-93-054
	DIYA	ACRYLO	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	100	UGL	TRP-93-055
	DIYA	BRDCLM	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.59	UGL	TRP-93-054
	DIYA	BRDCLM	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.59	UGL	TRP-93-055
	DIYA	C13DCP	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.58	UGL	TRP-93-054
	DIYA	C13DCP	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.58	UGL	TRP-93-055
	DIYA	C2AVE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	8.3	UGL	TRP-93-054

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	DYZA	C2AVE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	8.3	UGL	TRP-93-055
	DYZA	C2H3CL	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	2.6	UGL	TRP-93-054
	DYZA	C2H3CL	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	2.6	UGL	TRP-93-055
	DYZA	C2H5CL	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	1.9	UGL	TRP-93-054
	DYZA	C2H5CL	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	1.9	UGL	TRP-93-055
	DYZA	C6H6	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	C6H6	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DYZA	CCL3F	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	1.4	UGL	TRP-93-054
	DYZA	CCL3F	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	1.4	UGL	TRP-93-055
	DYZA	CCL4	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.58	UGL	TRP-93-054
	DYZA	CCL4	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.58	UGL	TRP-93-055
	DYZA	CH2CL2	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	2.3	UGL	TRP-93-054
	DYZA	CH2CL2	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	2.3	UGL	TRP-93-055
	DYZA	CH3BR	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	5.8	UGL	TRP-93-054
	DYZA	CH3BR	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	5.8	UGL	TRP-93-055
	DYZA	CH3CL	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	3.2	UGL	TRP-93-054
	DYZA	CH3CL	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	3.2	UGL	TRP-93-055
	DYZA	CHBR3	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	2.6	UGL	TRP-93-054
	DYZA	CHBR3	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	2.6	UGL	TRP-93-055
	DYZA	CHCL3	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	CHCL3	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DYZA	CL2BZ	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	10	UGL	TRP-93-054
	DYZA	CL2BZ	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	10	UGL	TRP-93-055
	DYZA	CLC6H5	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	CLC6H5	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DYZA	CS2	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	CS2	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DYZA	DBRCLM	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.67	UGL	TRP-93-054
	DYZA	DBRCLM	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.67	UGL	TRP-93-055
	DYZA	ETC6H5	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	ETC6H5	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DYZA	MEC6H5	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	MEC6H5	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAWA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	DYZA	MEK	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	6.4	UGL	TRP-93-054
	DYZA	MEK	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	6.4	UGL	TRP-93-055
	DYZA	MIBK	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	3	UGL	TRP-93-054
	DYZA	MIBK	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	3	UGL	TRP-93-055
	DYZA	MNBK	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	3.6	UGL	TRP-93-054
	DYZA	MNBK	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	3.6	UGL	TRP-93-055
	DYZA	STYR	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	STYR	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DYZA	T13DCP	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.7	UGL	TRP-93-054
	DYZA	T13DCP	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.7	UGL	TRP-93-055
	DYZA	TCLEA	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.51	UGL	TRP-93-054
	DYZA	TCLEA	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.51	UGL	TRP-93-055
	DYZA	TCLEE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	1.6	UGL	TRP-93-054
	DYZA	TCLEE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	1.6	UGL	TRP-93-055
	DYZA	TRCLE	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-054
	DYZA	TRCLE	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.5	UGL	TRP-93-055
	DYZA	XYLEN	TRP93054	DVTRP*54	02-JUN-93	10-JUN-93	10-JUN-93	<	.84	UGL	TRP-93-054
	DYZA	XYLEN	TRP93055	DVTRP*55	03-JUN-93	10-JUN-93	10-JUN-93	<	.84	UGL	TRP-93-055
	FGEA	111TCE	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	112TCE	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	1.2	UGL	TRP-93-058
	FGEA	11DCE	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.68	UGL	TRP-93-058
	FGEA	12DCE	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	12DCLP	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	2CLEVE	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.71	UGL	TRP-93-058
	FGEA	ACET	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	13	UGL	TRP-93-058
	FGEA	ACROLN	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	100	UGL	TRP-93-058
	FGEA	ACRYLO	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	100	UGL	TRP-93-058
	FGEA	BROCLM	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.59	UGL	TRP-93-058
	FGEA	C130CP	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.58	UGL	TRP-93-058
	FGEA	C2AVE	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	8.3	UGL	TRP-93-058
	FGEA	C2H3CL	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	2.6	UGL	TRP-93-058

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAWA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	FGEA	C2H5CL	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	1.9	UGL	TRP-93-058
	FGEA	C6H6	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	CCL3F	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	2.7	UGL	TRP-93-058
	FGEA	CCL4	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.58	UGL	TRP-93-058
	FGEA	CH2CL2	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	2.3	UGL	TRP-93-058
	FGEA	CH3BR	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	5.8	UGL	TRP-93-058
	FGEA	CH3CL	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	3.2	UGL	TRP-93-058
	FGEA	CHBR3	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	2.6	UGL	TRP-93-058
	FGEA	CHCL3	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	CL2BZ	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	10	UGL	TRP-93-058
	FGEA	CLC6H5	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	CS2	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	DBRCLM	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.67	UGL	TRP-93-058
	FGEA	ETC6H5	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	MEC6H5	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	6.4	UGL	TRP-93-058
	FGEA	MEK	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	3	UGL	TRP-93-058
	FGEA	MIBK	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	3.6	UGL	TRP-93-058
	FGEA	MNBK	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	STYR	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.7	UGL	TRP-93-058
	FGEA	T130CP	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.51	UGL	TRP-93-058
	FGEA	TCLEA	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	1.6	UGL	TRP-93-058
	FGEA	TCLEE	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	TYLEN	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.84	UGL	TRP-93-058
	FGEA	XYLEN	DVTRP058	DVTRP*58	24-JUN-93	28-JUN-93	28-JUN-93	<	.5	UGL	TRP-93-058
	FGEA	11TICE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	1.2	UGL	TRP-93-059
	FGEA	11TICE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGEA	11DCE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.68	UGL	TRP-93-059
	FGEA	11DCE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGEA	12DCE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGEA	12DCE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGEA	12DCLP	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.71	UGL	TRP-93-059
	FGEA	2CLEVE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	13	UGL	TRP-93-059
	FGEA	ACET	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<			

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6
TRIP BLANKS

USATHAWA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	FGGA	ACROLN	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	100	UGL	TRP-93-059
	FGGA	ACRYLO	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	100	UGL	TRP-93-059
	FGGA	BRDCLM	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.59	UGL	TRP-93-059
	FGGA	C13DCP	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.58	UGL	TRP-93-059
	FGGA	C2AVE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	8.3	UGL	TRP-93-059
	FGGA	C2H3CL	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	2.6	UGL	TRP-93-059
	FGGA	C2H5CL	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	1.9	UGL	TRP-93-059
	FGGA	C6H6	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGGA	CCL3F	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	1.9	UGL	TRP-93-059
	FGGA	CCL4	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.58	UGL	TRP-93-059
	FGGA	CH2CL2	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	2.3	UGL	TRP-93-059
	FGGA	CH3BR	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	5.8	UGL	TRP-93-059
	FGGA	CH3CL	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	3.2	UGL	TRP-93-059
	FGGA	CHBR3	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	2.6	UGL	TRP-93-059
	FGGA	CHCL3	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGGA	CL2B2	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	10	UGL	TRP-93-059
	FGGA	CLC6H5	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGGA	CS2	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.67	UGL	TRP-93-059
	FGGA	DBRCLM	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGGA	ETC6H5	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGGA	MEC6H5	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	6.4	UGL	TRP-93-059
	FGGA	MEK	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	3	UGL	TRP-93-059
	FGGA	MTBK	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	3.6	UGL	TRP-93-059
	FGGA	MNBK	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGGA	STYR	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.7	UGL	TRP-93-059
	FGGA	T13DCP	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.51	UGL	TRP-93-059
	FGGA	TCLEA	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	1.6	UGL	TRP-93-059
	FGGA	TCLEE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	FGGA	TRCLE	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.84	UGL	TRP-93-059
	FGGA	XYLEN	DVTRP059	DVTRP*59	25-JUN-93	30-JUN-93	30-JUN-93	<	.5	UGL	TRP-93-059
	ICFA	111TCE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	111TCE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	111TCE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	ICFA	112TCE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	1.2	UGL	TRP-93-141
	ICFA	112TCE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	1.2	UGL	TRP-93-651
	ICFA	112TCE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	1.2	UGL	TRP-93-648
	ICFA	11DCE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	11DCE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	11DCE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	11DCE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.68	UGL	TRP-93-141
	ICFA	11DCE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.68	UGL	TRP-93-651
	ICFA	11DCE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.68	UGL	TRP-93-648
	ICFA	12DCE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	12DCE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	12DCE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	12DCE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	12DCE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	12DCE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	12DCLP	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	12DCLP	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	12DCLP	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	2CLEVE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.71	UGL	TRP-93-141
	ICFA	2CLEVE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.71	UGL	TRP-93-651
	ICFA	2CLEVE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.71	UGL	TRP-93-648
	ICFA	ACET	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	13	UGL	TRP-93-141
	ICFA	ACET	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	13	UGL	TRP-93-651
	ICFA	ACET	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	13	UGL	TRP-93-648
	ICFA	ACROLN	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	100	UGL	TRP-93-141
	ICFA	ACROLN	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	100	UGL	TRP-93-651
	ICFA	ACROLN	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	100	UGL	TRP-93-648
	ICFA	ACRYLO	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	100	UGL	TRP-93-141
	ICFA	ACRYLO	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	100	UGL	TRP-93-651
	ICFA	ACRYLO	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	100	UGL	TRP-93-648
	ICFA	BRDCLM	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.59	UGL	TRP-93-141
	ICFA	BRDCLM	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.59	UGL	TRP-93-651
	ICFA	BRDCLM	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.59	UGL	TRP-93-648

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	ICFA	C130CP	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.58	UGL	TRP-93-141
	ICFA	C130CP	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.58	UGL	TRP-93-651
	ICFA	C130CP	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.58	UGL	TRP-93-648
	ICFA	C2AVE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	8.3	UGL	TRP-93-141
	ICFA	C2AVE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	8.3	UGL	TRP-93-651
	ICFA	C2AVE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	8.3	UGL	TRP-93-648
	ICFA	C2H3CL	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	2.6	UGL	TRP-93-141
	ICFA	C2H3CL	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	2.6	UGL	TRP-93-651
	ICFA	C2H3CL	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	2.6	UGL	TRP-93-648
	ICFA	C2H5CL	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	1.9	UGL	TRP-93-141
	ICFA	C2H5CL	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	1.9	UGL	TRP-93-651
	ICFA	C2H5CL	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	1.9	UGL	TRP-93-648
	ICFA	C6H6	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	C6H6	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	C6H6	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	CCL3F	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	1.4	UGL	TRP-93-141
	ICFA	CCL3F	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	1.4	UGL	TRP-93-651
	ICFA	CCL3F	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	1.4	UGL	TRP-93-648
	ICFA	CCL4	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.58	UGL	TRP-93-141
	ICFA	CCL4	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.58	UGL	TRP-93-651
	ICFA	CCL4	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.58	UGL	TRP-93-648
	ICFA	CH2CL2	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	13	UGL	TRP-93-141
	ICFA	CH2CL2	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	9.4	UGL	TRP-93-651
	ICFA	CH2CL2	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	2.8	UGL	TRP-93-648
	ICFA	CH3BR	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	5.8	UGL	TRP-93-141
	ICFA	CH3BR	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	5.8	UGL	TRP-93-651
	ICFA	CH3BR	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	5.8	UGL	TRP-93-648
	ICFA	CH3CL	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	3.2	UGL	TRP-93-141
	ICFA	CH3CL	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	3.2	UGL	TRP-93-651
	ICFA	CH3CL	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	3.2	UGL	TRP-93-648
	ICFA	CHBR3	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	2.6	UGL	TRP-93-141
	ICFA	CHBR3	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	2.6	UGL	TRP-93-651
	ICFA	CHBR3	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	2.6	UGL	TRP-93-648

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	ICFA	CHCL3	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	CHCL3	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	CHCL3	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	CL2BZ	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	10	UGL	TRP-93-141
	ICFA	CL2BZ	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	10	UGL	TRP-93-651
	ICFA	CL2BZ	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	10	UGL	TRP-93-648
	ICFA	CLC6H5	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	CLC6H5	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	CLC6H5	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	CS2	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	CS2	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	CS2	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	DBRCLM	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.67	UGL	TRP-93-141
	ICFA	DBRCLM	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.67	UGL	TRP-93-651
	ICFA	DBRCLM	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.67	UGL	TRP-93-648
	ICFA	ETC6H5	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	ETC6H5	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	ETC6H5	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	MEC6H5	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	MEC6H5	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	MEC6H5	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	MEK	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	6.4	UGL	TRP-93-141
	ICFA	MEK	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	6.4	UGL	TRP-93-651
	ICFA	MEK	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	6.4	UGL	TRP-93-648
	ICFA	MIBK	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	3	UGL	TRP-93-141
	ICFA	MIBK	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	3	UGL	TRP-93-651
	ICFA	MIBK	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	3	UGL	TRP-93-648
	ICFA	MNBK	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	3.6	UGL	TRP-93-141
	ICFA	MNBK	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	3.6	UGL	TRP-93-651
	ICFA	MNBK	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	3.6	UGL	TRP-93-648
	ICFA	STYR	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	STYR	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	STYR	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6
TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	ICFA	T13DCP	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.7	UGL	TRP-93-141
	ICFA	T13DCP	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.7	UGL	TRP-93-651
	ICFA	T13DCP	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.7	UGL	TRP-93-648
	ICFA	TCLEA	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.51	UGL	TRP-93-141
	ICFA	TCLEA	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.51	UGL	TRP-93-651
	ICFA	TCLEA	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.51	UGL	TRP-93-648
	ICFA	TCLEE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	1.6	UGL	TRP-93-141
	ICFA	TCLEE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	1.6	UGL	TRP-93-651
	ICFA	TCLEE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	1.6	UGL	TRP-93-648
	ICFA	TRCLE	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-141
	ICFA	TRCLE	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-651
	ICFA	TRCLE	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.5	UGL	TRP-93-648
	ICFA	XYLEN	DVTRP141	VTRP*154	23-SEP-93	27-SEP-93	27-SEP-93	<	.84	UGL	TRP-93-141
	ICFA	XYLEN	DVTRP147	VTRP*156	24-SEP-93	27-SEP-93	27-SEP-93	<	.84	UGL	TRP-93-651
	ICFA	XYLEN	DVTRP153	VTRP*153	22-SEP-93	27-SEP-93	27-SEP-93	<	.84	UGL	TRP-93-648
	XODE	111TCE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	1.2	UGL	TRP-94-791
	XODE	112TCE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.5	UGL	TRP-94-791
	XODE	11DCE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.5	UGL	TRP-94-791
	XODE	11DCE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.68	UGL	TRP-94-791
	XODE	12DCE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.5	UGL	TRP-94-791
	XODE	12DCE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.5	UGL	TRP-94-791
	XODE	12DCLP	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.71	UGL	TRP-94-791
	XODE	2CLEVE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.13	UGL	TRP-94-791
	XODE	ACET	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	100	UGL	TRP-94-791
	XODE	ACROLN	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	100	UGL	TRP-94-791
	XODE	ACRYLO	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.59	UGL	TRP-94-791
	XODE	BRDCLM	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.58	UGL	TRP-94-791
	XODE	CT3DCP	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	8.3	UGL	TRP-94-791
	XODE	C2AVE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	2.6	UGL	TRP-94-791
	XODE	C2H3CL	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	1.9	UGL	TRP-94-791
	XODE	C2H5CL	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	.5	UGL	TRP-94-791
	XODE	C6H6	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<	1.4	UGL	TRP-94-791
	XODE	CCL3F	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	<			

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6
TRIP BLANKS

USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	Value	Units	IRDMIS Site ID
UM20	CCL4	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.58	UGL	TRP-94-791
	CH2CL2	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	2.3	UGL	TRP-94-791
	CH3BR	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	5.8	UGL	TRP-94-791
	CH3CL	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	3.2	UGL	TRP-94-791
	CHBR3	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	2.6	UGL	TRP-94-791
	CHCL3	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.5	UGL	TRP-94-791
	CL2BZ	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	10	UGL	TRP-94-791
	CLC6H5	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.5	UGL	TRP-94-791
	CS2	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.67	UGL	TRP-94-791
	DBRCLM	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.5	UGL	TRP-94-791
	ETC6H5	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.5	UGL	TRP-94-791
	MEC6H5	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	6.4	UGL	TRP-94-791
	MEK	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	3	UGL	TRP-94-791
	MIBK	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	3.6	UGL	TRP-94-791
	MNBK	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.5	UGL	TRP-94-791
	STYR	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.7	UGL	TRP-94-791
	T13DCP	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.51	UGL	TRP-94-791
	TCLEA	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	1.6	UGL	TRP-94-791
	TCLEE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.5	UGL	TRP-94-791
	TRCLE	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.84	UGL	TRP-94-791
	XYLEN	DVTRP791	DV3M*791	12-AUG-94	19-AUG-94	19-AUG-94	.5	UGL	TRP-94-791
	111TCE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.5	UGL	TRP-94-792
	112TCE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	1.2	UGL	TRP-94-792
	11DCE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.5	UGL	TRP-94-792
	11DCE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.68	UGL	TRP-94-792
	12DCE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.5	UGL	TRP-94-792
	12DCE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.5	UGL	TRP-94-792
	12DCLP	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.5	UGL	TRP-94-792
	2CLVE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.71	UGL	TRP-94-792
	ACET	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	13	UGL	TRP-94-792
	ACROLN	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	100	UGL	TRP-94-792
	ACRYLO	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	100	UGL	TRP-94-792
	BRDCLM	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	.59	UGL	TRP-94-792

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	XDEE	C130CP	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.58	UGL	TRP-94-792
	XDEE	C2AVE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	8.3	UGL	TRP-94-792
	XDEE	C2H3CL	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	2.6	UGL	TRP-94-792
	XDEE	C2H5CL	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	1.9	UGL	TRP-94-792
	XDEE	C6H6	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	CCL3F	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	1.4	UGL	TRP-94-792
	XDEE	CCL4	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.58	UGL	TRP-94-792
	XDEE	CH2CL2	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	2.3	UGL	TRP-94-792
	XDEE	CH3BR	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	5.8	UGL	TRP-94-792
	XDEE	CH3CL	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	3.2	UGL	TRP-94-792
	XDEE	CHBR3	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	2.6	UGL	TRP-94-792
	XDEE	CHCL3	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	CL2B2	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	10	UGL	TRP-94-792
	XDEE	CLC6H5	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	CS2	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.67	UGL	TRP-94-792
	XDEE	DBRCLM	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	ETC6H5	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	MEC6H5	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	6.4	UGL	TRP-94-792
	XDEE	MEK	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	3	UGL	TRP-94-792
	XDEE	MTBK	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	MNBK	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.7	UGL	TRP-94-792
	XDEE	STYR	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.51	UGL	TRP-94-792
	XDEE	T130CP	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	1.6	UGL	TRP-94-792
	XDEE	TCLEA	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	TCLEE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.84	UGL	TRP-94-792
	XDEE	TRCLE	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	.5	UGL	TRP-94-792
	XDEE	XYLEN	DV3M*792	DV3M*792	18-AUG-94	31-AUG-94	31-AUG-94	<	1.2	UGL	TRP-94-792
	XDRG	11TCE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	112TCE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	11DCE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.68	UGL	TRP-95-757
	XDRG	11DCE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	12DCE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	12DCE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	XDRG	12DCLP	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	2CLEVE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.71	UGL	TRP-95-757
	XDRG	ACET	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	13	UGL	TRP-95-757
	XDRG	ACROLN	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	100	UGL	TRP-95-757
	XDRG	ACRYLO	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	100	UGL	TRP-95-757
	XDRG	BRDCLM	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.59	UGL	TRP-95-757
	XDRG	C13DCP	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.58	UGL	TRP-95-757
	XDRG	C2AVE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	8.3	UGL	TRP-95-757
	XDRG	C2H3CL	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	2.6	UGL	TRP-95-757
	XDRG	C2H5CL	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	1.9	UGL	TRP-95-757
	XDRG	C6H6	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	CCL3F	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	1.4	UGL	TRP-95-757
	XDRG	CCL4	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.58	UGL	TRP-95-757
	XDRG	CH2CL2	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	2.3	UGL	TRP-95-757
	XDRG	CH3BR	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	5.8	UGL	TRP-95-757
	XDRG	CH3CL	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	3.2	UGL	TRP-95-757
	XDRG	CHBR3	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	2.6	UGL	TRP-95-757
	XDRG	CHCL3	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	CL2BZ	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	10	UGL	TRP-95-757
	XDRG	CLC6H5	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	CS2	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.67	UGL	TRP-95-757
	XDRG	DBRCLM	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	ETC6H5	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	MEC6H5	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	6.4	UGL	TRP-95-757
	XDRG	MEK	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	3	UGL	TRP-95-757
	XDRG	MIBK	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	3.6	UGL	TRP-95-757
	XDRG	MNBK	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	STYR	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.7	UGL	TRP-95-757
	XDRG	T13DCP	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.51	UGL	TRP-95-757
	XDRG	TCLEA	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	1.6	UGL	TRP-95-757
	XDRG	TCLEE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.5	UGL	TRP-95-757
	XDRG	TRCLE	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<	.84	UGL	TRP-95-757
	XDRG	XYLEN	DVTRP757	DV3M*757	06-FEB-95	08-FEB-95	08-FEB-95	<			

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAMA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	Value	Units	IRDMIS Site ID
LM20	XOVE	111TCE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	112TCE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	1.2	UGL	TRP-94-212
	XOVE	110DCE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	110CLE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.68	UGL	TRP-94-212
	XOVE	120DCE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	120CLE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	120CLP	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	2CLEVE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.71	UGL	TRP-94-212
	XOVE	ACET	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.13	UGL	TRP-94-212
	XOVE	ACROLN	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	100	UGL	TRP-94-212
	XOVE	ACRYLO	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	100	UGL	TRP-94-212
	XOVE	BRDCLM	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.59	UGL	TRP-94-212
	XOVE	CT30CP	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.58	UGL	TRP-94-212
	XOVE	C2AVE	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	8.3	UGL	TRP-94-212
	XOVE	C2H3CL	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	2.6	UGL	TRP-94-212
	XOVE	C2H5CL	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	1.9	UGL	TRP-94-212
	XOVE	C6H6	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	CCL3F	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	1.4	UGL	TRP-94-212
	XOVE	CCL4	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.58	UGL	TRP-94-212
	XOVE	CH2CL2	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	2.3	UGL	TRP-94-212
	XOVE	CH3BR	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	5.8	UGL	TRP-94-212
	XOVE	CH3CL	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	3.2	UGL	TRP-94-212
	XOVE	CHBR3	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	2.6	UGL	TRP-94-212
	XOVE	CHCL3	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	CL2BZ	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	10	UGL	TRP-94-212
	XOVE	CLC6H5	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	CS2	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	DBRCLM	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.67	UGL	TRP-94-212
	XOVE	ETC6H5	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.5	UGL	TRP-94-212
	XOVE	MEC6H5	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	.68	UGL	TRP-94-212
	XOVE	MEK	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	6.4	UGL	TRP-94-212
	XOVE	MTBK	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	3	UGL	TRP-94-212
	XOVE	MNBK	DVTRP212	DV3M*754	06-OCT-94	10-OCT-94	10-OCT-94	3.6	UGL	TRP-94-212

Table FS-3
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups: 3, 5 and 6

TRIP BLANKS

USATHAWA Method Code	Lot	Test Name	IRDMIS Field Sample Number	Lab Number	Sample Date	Prep Date	Analysis Date	<	Value	Units	IRDMIS Site ID
UM20	XDVE	STYR	DVTRP212	DV3W*754	06-OCT-94	10-OCT-94	10-OCT-94	<	.5	UGL	TRP-94-212
	XDVE	T13DCP	DVTRP212	DV3W*754	06-OCT-94	10-OCT-94	10-OCT-94	<	.7	UGL	TRP-94-212
	XDVE	TCLEA	DVTRP212	DV3W*754	06-OCT-94	10-OCT-94	10-OCT-94	<	.51	UGL	TRP-94-212
	XDVE	TCLEE	DVTRP212	DV3W*754	06-OCT-94	10-OCT-94	10-OCT-94	<	1.6	UGL	TRP-94-212
	XDVE	TRCLE	DVTRP212	DV3W*754	06-OCT-94	10-OCT-94	10-OCT-94	<	.5	UGL	TRP-94-212
	XDVE	XYLEN	DVTRP212	DV3W*754	06-OCT-94	10-OCT-94	10-OCT-94	<	.84	UGL	TRP-94-212

TABLE FS-4
SUMMARY OF ANALYTES DETECTED IN QUALITY CONTROL SAMPLES
SUPPLEMENTAL SITE INVESTIGATION
GROUPS 3,5 & 6
FORT DEVENS, MASSACHUSETTS

TRIP BLANKS

Analysis	Frequency of Detection	Minimum Detection	Maximum Detection
<u>VOCs</u>			
Trifluorochloromethane	2:14	1.9	2.7
Methylene Chloride	3:14	2.8	13
Chloroform	1:14	0.6	0.6
Toluene	2:14	0.7	0.7

Notes:

VOCs = Volatile Organic Compounds

All results ug/L

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
	00	SBK93123	HARD	FDPA	24-JUN-93	0	38000	UGL	SBK-93-123	DV3W*641
		SBK93123	HARD	FDPA	24-JUN-93	0	38000	UGL	SBK-93-123	DV3W*641
		SBK93118	TOC	EOZA	03-JUN-93	0	1000	UGL	SBK-93-118	DV3W*599
		SBK93123	TPHC	FDUA	24-JUN-93	0	180	UGL	SBK-93-123	DV3W*641
		SBK93123	TPHC	FDUA	24-JUN-93	0	180	UGL	SBK-93-123	DV3W*641
		SBK93119	TPHC	FDNA	03-JUN-93	0	178	UGL	SBK-93-119	DV3W*600
		SBK93118	TPHC	FDNA	03-JUN-93	0	171	UGL	SBK-93-118	DV3W*599
		SBK93123	TSS	FDXA	24-JUN-93	0	4000	UGL	SBK-93-123	DV3W*641
		SBK93123	TSS	FDXA	24-JUN-93	0	4000	UGL	SBK-93-123	DV3W*641
	99	SBK93123	HCO3	FVYA	24-JUN-93	0	6100	UGL	SBK-93-123	DV3W*641
		SBK93123	HCO3	FVYA	24-JUN-93	0	6100	UGL	SBK-93-123	DV3W*641
	SB01	SBK93121	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-121	DV3W*602
HG IN WATER BY CVAA		SBK93120	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-120	DV3W*601
HG IN WATER BY CVAA		SBK93119	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-119	DV3W*600
HG IN WATER BY CVAA		SBK93124	HG	IEDA	23-SEP-93	0	.243	UGL	SBK-93-124	DV3W*649
HG IN WATER BY CVAA		SBK93120	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-120	DV3W*601
HG IN WATER BY CVAA		SBK93121	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-121	DV3W*602
HG IN WATER BY CVAA		SBK93124	HG	IEDA	23-SEP-93	0	.243	UGL	SBK-93-124	DV3W*649
HG IN WATER BY CVAA		SBK93123	HG	FQBA	24-JUN-93	0	.243	UGL	SBK-93-123	DV3W*641
HG IN WATER BY CVAA		DV3F*641	HG	FQBA	24-JUN-93	0	.243	UGL	SBK-93-123	DV3F*641
HG IN WATER BY CVAA		SBK93118	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-118	DV3W*599
HG IN WATER BY CVAA		SBK93119	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-119	DV3W*600
HG IN WATER BY CVAA		SBK93123	HG	FQBA	24-JUN-93	0	.243	UGL	SBK-93-123	DV3W*641
HG IN WATER BY CVAA		SBK93118	HG	DOJA	03-JUN-93	0	.243	UGL	SBK-93-118	DV3W*599
	SD09	SBK93121	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-121	DV3W*602
TL IN WATER BY GFAA		SBK93120	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-120	DV3W*601
TL IN WATER BY GFAA		SBK93119	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-119	DV3W*600
TL IN WATER BY GFAA		SBK93118	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-118	DV3W*599
TL IN WATER BY GFAA		SBK93123	TL	DNTA	24-JUN-93	0	6.99	UGL	SBK-93-123	DV3W*641
TL IN WATER BY GFAA		SBK93124	TL	GHQA	23-SEP-93	0	6.99	UGL	SBK-93-124	DV3W*649
TL IN WATER BY GFAA		SBK93123	TL	DNTA	24-JUN-93	0	6.99	UGL	SBK-93-123	DV3W*641
TL IN WATER BY GFAA		DV3F*641	TL	DNTA	24-JUN-93	0	6.99	UGL	SBK-93-123	DV3F*641
TL IN WATER BY GFAA		SBK93118	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-118	DV3W*599
TL IN WATER BY GFAA		SBK93119	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-119	DV3W*600

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
TL IN WATER BY GFAA	SD09	SBK93120	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-120	DV3W*601
TL IN WATER BY GFAA		SBK93121	TL	DNOA	03-JUN-93	0	6.99	UGL	SBK-93-121	DV3W*602
TL IN WATER BY GFAA		SBK93124	TL	GNQA	23-SEP-93	0	6.99	UGL	SBK-93-124	DV3W*649
PB IN WATER BY GFAA	SD20	SBK93121	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-121	DV3W*602
PB IN WATER BY GFAA		SBK93124	PB	INGA	23-SEP-93	0	1.26	UGL	SBK-93-124	DV3W*649
PB IN WATER BY GFAA		SBK93123	PB	EWGA	24-JUN-93	0	1.26	UGL	SBK-93-123	DV3W*641
PB IN WATER BY GFAA		DV3F*641	PB	EWGA	24-JUN-93	0	1.26	UGL	SBK-93-123	DV3F*641
PB IN WATER BY GFAA		SBK93118	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-118	DV3W*599
PB IN WATER BY GFAA		SBK93119	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-119	DV3W*600
PB IN WATER BY GFAA		SBK93120	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-120	DV3W*601
PB IN WATER BY GFAA		SBK93124	PB	INGA	23-SEP-93	0	1.26	UGL	SBK-93-124	DV3W*649
PB IN WATER BY GFAA		SBK93118	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-118	DV3W*599
PB IN WATER BY GFAA		SBK93120	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-120	DV3W*601
PB IN WATER BY GFAA		SBK93121	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-121	DV3W*602
PB IN WATER BY GFAA		SBK93123	PB	EWGA	24-JUN-93	0	1.26	UGL	SBK-93-123	DV3W*641
PB IN WATER BY GFAA		SBK93119	PB	EMBA	03-JUN-93	0	1.26	UGL	SBK-93-119	DV3W*600
SE IN WATER BY GFAA	SD21	SBK93121	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-121	DV3W*602
SE IN WATER BY GFAA		SBK93124	SE	HNMA	23-SEP-93	0	3.02	UGL	SBK-93-124	DV3W*649
SE IN WATER BY GFAA		SBK93123	SE	EFJA	24-JUN-93	0	3.02	UGL	SBK-93-123	DV3W*641
SE IN WATER BY GFAA		DV3F*641	SE	EFJA	24-JUN-93	0	3.02	UGL	SBK-93-123	DV3F*641
SE IN WATER BY GFAA		SBK93118	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-118	DV3W*599
SE IN WATER BY GFAA		SBK93119	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-119	DV3W*600
SE IN WATER BY GFAA		SBK93120	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-120	DV3W*601
SE IN WATER BY GFAA		SBK93121	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-121	DV3W*602
SE IN WATER BY GFAA		SBK93124	SE	HNMA	23-SEP-93	0	3.02	UGL	SBK-93-124	DV3W*649
SE IN WATER BY GFAA		SBK93120	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-120	DV3W*601
SE IN WATER BY GFAA		SBK93123	SE	EFJA	24-JUN-93	0	3.02	UGL	SBK-93-123	DV3W*641
SE IN WATER BY GFAA		SBK93118	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-118	DV3W*599
SE IN WATER BY GFAA		SBK93119	SE	EFJA	03-JUN-93	0	3.02	UGL	SBK-93-119	DV3W*600
AS IN WATER BY GFAA	SD22	SBK93121	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-121	DV3W*602
AS IN WATER BY GFAA		SBK93120	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-120	DV3W*601
AS IN WATER BY GFAA		SBK93118	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-118	DV3W*599
AS IN WATER BY GFAA		SBK93124	AS	HOKA	23-SEP-93	0	2.54	UGL	SBK-93-124	DV3W*649
AS IN WATER BY GFAA		SBK93123	AS	ESJA	24-JUN-93	0	2.54	UGL	SBK-93-123	DV3W*641

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
AS IN WATER BY GFAA	SD22	DV3F*641	AS	ESJA	24-JUN-93	0	2.54	UGL	SBK-93-123	DV3F*641
AS IN WATER BY GFAA		SBK93118	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-118	DV3M*599
AS IN WATER BY GFAA		SBK93119	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-119	DV3M*600
AS IN WATER BY GFAA		SBK93120	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-120	DV3M*601
AS IN WATER BY GFAA		SBK93121	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-121	DV3M*602
AS IN WATER BY GFAA		SBK93124	AS	HOKA	23-SEP-93	0	2.54	UGL	SBK-93-124	DV3M*649
AS IN WATER BY GFAA	SD28	SBK93123	AS	ESJA	24-JUN-93	0	2.54	UGL	SBK-93-123	DV3M*641
AS IN WATER BY GFAA		SBK93119	AS	ESCA	03-JUN-93	0	2.54	UGL	SBK-93-119	DV3M*600
SB IN WATER BY GFAA		DV3F*641	SB	FRAA	24-JUN-93	0	5.89	UGL	SBK-93-123	DV3F*641
SB IN WATER BY GFAA		SBK93123	SB	FRAA	24-JUN-93	0	3.03	UGL	SBK-93-123	DV3M*641
SB IN WATER BY GFAA		SBK93124	SB	FRTA	23-SEP-93	0	3.03	UGL	SBK-93-124	DV3M*649
SB IN WATER BY GFAA		SBK93121	SB	YMW	03-JUN-93	0	3.03	UGL	SBK-93-121	DV3M*602
SB IN WATER BY GFAA	SS10	SBK93120	SB	YMW	03-JUN-93	0	3.03	UGL	SBK-93-120	DV3M*601
SB IN WATER BY GFAA		SBK93118	SB	YMW	03-JUN-93	0	3.03	UGL	SBK-93-118	DV3M*599
SB IN WATER BY GFAA		SBK93119	SB	YMW	03-JUN-93	0	3.03	UGL	SBK-93-119	DV3M*600
SB IN WATER BY GFAA		SBK93118	SB	YMW	03-JUN-93	0	3.03	UGL	SBK-93-118	DV3M*599
SB IN WATER BY GFAA		SBK93120	SB	YMW	03-JUN-93	0	3.03	UGL	SBK-93-120	DV3M*601
SB IN WATER BY GFAA		SBK93121	SB	YMW	03-JUN-93	0	3.03	UGL	SBK-93-121	DV3M*602
SB IN WATER BY GFAA		SBK93124	SB	FRTA	23-SEP-93	0	3.03	UGL	SBK-93-124	DV3M*649
SB IN WATER BY GFAA		SBK93123	SB	FRAA	24-JUN-93	0	3.03	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93120	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93123	AG	EVHA	24-JUN-93	0	4.6	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93118	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		DV3F*641	AG	EVHA	24-JUN-93	0	4.6	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP	SS10	SBK93118	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93123	AG	EVHA	24-JUN-93	0	4.6	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	AG	HXIA	23-SEP-93	0	4.6	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93124	AG	HXIA	23-SEP-93	0	4.6	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93119	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93119	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93121	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93121	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93121	AG	EVBA	03-JUN-93	0	4.6	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	AG	EVBA	03-JUN-93	0	141	UGL	SBK-93-120	DV3M*601

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK93118	AL	EVBA	03-JUN-93	0	141	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93123	AL	EVBA	24-JUN-93	0	141	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	AL	HXIA	23-SEP-93	0	141	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93118	AL	EVBA	03-JUN-93	0	141	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		DV3F*641	AL	EVBA	24-JUN-93	0	141	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93123	AL	EVBA	24-JUN-93	0	141	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	AL	HXIA	23-SEP-93	0	141	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93121	AL	EVBA	03-JUN-93	0	141	UGL	SBK-93-121	DV3M*601
METALS IN WATER BY ICAP		SBK93120	AL	EVBA	03-JUN-93	0	141	UGL	SBK-93-120	DV3M*602
METALS IN WATER BY ICAP		SBK93119	AL	EVBA	03-JUN-93	0	141	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93121	AL	EVBA	03-JUN-93	0	141	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93120	BA	EVBA	03-JUN-93	0	5	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93119	BA	EVBA	03-JUN-93	0	5	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93121	BA	EVBA	03-JUN-93	0	5	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	BA	EVBA	03-JUN-93	0	5	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93118	BA	EVBA	03-JUN-93	0	5	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93123	BA	EVBA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	BA	HXIA	23-SEP-93	0	5	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93118	BA	EVBA	03-JUN-93	0	5	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		DV3F*641	BA	EVBA	24-JUN-93	0	5	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93123	BA	EVBA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	BA	HXIA	23-SEP-93	0	5	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93121	BA	EVBA	03-JUN-93	0	5	UGL	SBK-93-121	DV3M*601
METALS IN WATER BY ICAP		SBK93120	BE	EVBA	03-JUN-93	0	5	UGL	SBK-93-120	DV3M*602
METALS IN WATER BY ICAP		SBK93118	BE	EVBA	03-JUN-93	0	5	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		DV3F*641	BE	EVBA	24-JUN-93	0	5	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93121	BE	EVBA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93118	BE	EVBA	03-JUN-93	0	5	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93123	BE	EVBA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	BE	HXIA	23-SEP-93	0	5	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93121	BE	EVBA	03-JUN-93	0	5	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	BE	EVBA	03-JUN-93	0	5	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93119	BE	EVBA	03-JUN-93	0	5	UGL	SBK-93-119	DV3M*600

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK93119	BE	EVBA	03-JUN-93	0	5	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93121	CA	EVBA	03-JUN-93	0	500	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93118	CA	EVBA	03-JUN-93	0	500	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93123	CA	EVBA	24-JUN-93	0	500	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	CA	EVBA	23-SEP-93	0	500	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		DV3F*641	CA	EVBA	24-JUN-93	0	500	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93123	CA	EVBA	24-JUN-93	0	500	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	CA	EVBA	23-SEP-93	0	500	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93121	CA	EVBA	03-JUN-93	0	500	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	CA	EVBA	03-JUN-93	0	500	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93119	CA	EVBA	03-JUN-93	0	500	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93118	CA	EVBA	03-JUN-93	0	500	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93120	CA	EVBA	03-JUN-93	0	500	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93121	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93124	CD	EVBA	23-SEP-93	0	4.01	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93121	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93118	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93123	CD	EVBA	24-JUN-93	0	4.01	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	CD	EVBA	23-SEP-93	0	4.01	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		DV3F*641	CD	EVBA	24-JUN-93	0	4.01	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93123	CD	EVBA	24-JUN-93	0	4.01	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93120	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93119	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93118	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93120	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93118	CD	EVBA	03-JUN-93	0	4.01	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93120	CD	EVBA	03-JUN-93	0	38.2	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93118	CD	EVBA	03-JUN-93	0	25	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93121	CD	EVBA	24-JUN-93	0	25	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93123	CD	EVBA	23-SEP-93	0	25	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93124	CD	EVBA	24-JUN-93	0	25	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		DV3F*641	CD	EVBA	24-JUN-93	0	25	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93123	CD	EVBA	23-SEP-93	0	25	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93124	CD	EVBA	03-JUN-93	0	25	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93121	CD	EVBA	03-JUN-93	0	25	UGL	SBK-93-120	DV3M*601

RINSE BLANKS

Method Description	USATHAMA Field	Method Code	Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK93119	CO	EVBA	03-JUN-93	0	<	25	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93120	CO	EVBA	03-JUN-93	0	<	25	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93119	CO	EVBA	03-JUN-93	0	<	25	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93118	CR	EVBA	03-JUN-93	0	<	8.78	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93118	CR	EVBA	03-JUN-93	0	<	8.78	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93119	CR	EVBA	03-JUN-93	0	<	6.02	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93124	CR	HX1A	23-SEP-93	0	<	6.02	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93121	CR	EVBA	03-JUN-93	0	<	6.02	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93121	CR	EVBA	03-JUN-93	0	<	6.02	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93123	CR	EVHA	24-JUN-93	0	<	6.02	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	CR	HX1A	23-SEP-93	0	<	6.02	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		DV3F*641	CR	EVHA	24-JUN-93	0	<	6.02	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93123	CR	EVHA	24-JUN-93	0	<	6.02	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93120	CR	EVBA	03-JUN-93	0	<	6.02	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93120	CR	EVBA	03-JUN-93	0	<	6.02	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93118	CU	EVBA	03-JUN-93	0	<	24.7	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93118	CU	EVBA	03-JUN-93	0	<	24.7	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93119	CU	EVBA	03-JUN-93	0	<	11.9	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93119	CU	EVBA	03-JUN-93	0	<	11.9	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93120	CU	EVBA	03-JUN-93	0	<	8.93	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93120	CU	EVBA	03-JUN-93	0	<	8.93	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93121	CU	EVBA	03-JUN-93	0	<	8.31	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93121	CU	EVBA	03-JUN-93	0	<	8.31	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93124	CU	HX1A	23-SEP-93	0	<	8.09	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93123	CU	EVHA	24-JUN-93	0	<	8.09	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	CU	HX1A	23-SEP-93	0	<	8.09	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93123	CU	EVHA	24-JUN-93	0	<	8.09	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		DV3F*641	CU	EVHA	24-JUN-93	0	<	8.09	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93120	FE	EVBA	03-JUN-93	0	<	261	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93120	FE	EVBA	03-JUN-93	0	<	261	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93121	FE	EVBA	03-JUN-93	0	<	179	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93121	FE	EVBA	03-JUN-93	0	<	179	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93118	FE	EVBA	03-JUN-93	0	<	80.5	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93118	FE	EVBA	03-JUN-93	0	<	80.5	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93119	FE	EVBA	03-JUN-93	0	<	78.5	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93119	FE	EVBA	03-JUN-93	0	<	78.5	UGL	SBK-93-119	DV3M*600

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
METALS IN WATER BY ICAP	SS10	SBK93124	FE	EVHA	23-SEP-93	0	38.8	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93123	FE	EVHA	24-JUN-93	0	38.8	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		DV3F*641	FE	EVHA	24-JUN-93	0	38.8	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93123	FE	EVHA	24-JUN-93	0	38.8	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	FE	EVHA	23-SEP-93	0	38.8	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93124	K	EVHA	23-SEP-93	0	3310	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93124	K	EVHA	23-SEP-93	0	552	UGL	SBK-93-124	DV3M*641
METALS IN WATER BY ICAP		SBK93123	K	EVHA	24-JUN-93	0	552	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93121	K	EVHA	03-JUN-93	0	375	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93118	K	EVHA	03-JUN-93	0	375	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		DV3F*641	K	EVHA	24-JUN-93	0	375	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93119	K	EVHA	03-JUN-93	0	375	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93118	K	EVHA	03-JUN-93	0	375	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93121	K	EVHA	03-JUN-93	0	375	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	K	EVHA	03-JUN-93	0	375	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93119	K	EVHA	03-JUN-93	0	375	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93120	K	EVHA	03-JUN-93	0	500	UGL	SBK-93-120	DV3M*600
METALS IN WATER BY ICAP		SBK93121	MG	EVHA	03-JUN-93	0	500	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93118	MG	EVHA	03-JUN-93	0	500	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93123	MG	EVHA	03-JUN-93	0	500	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	MG	EVHA	23-SEP-93	0	500	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		DV3F*641	MG	EVHA	24-JUN-93	0	500	UGL	SBK-93-123	DV3F*641
METALS IN WATER BY ICAP		SBK93123	MG	EVHA	24-JUN-93	0	500	UGL	SBK-93-123	DV3M*641
METALS IN WATER BY ICAP		SBK93124	MG	EVHA	23-SEP-93	0	500	UGL	SBK-93-124	DV3M*649
METALS IN WATER BY ICAP		SBK93121	MG	EVHA	03-JUN-93	0	500	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93120	MG	EVHA	03-JUN-93	0	500	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93119	MG	EVHA	03-JUN-93	0	500	UGL	SBK-93-119	DV3M*600
METALS IN WATER BY ICAP		SBK93118	MG	EVHA	03-JUN-93	0	500	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93120	MN	EVHA	03-JUN-93	0	4.03	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93118	MN	EVHA	03-JUN-93	0	4.03	UGL	SBK-93-118	DV3M*599
METALS IN WATER BY ICAP		SBK93120	MN	EVHA	03-JUN-93	0	3.75	UGL	SBK-93-120	DV3M*601
METALS IN WATER BY ICAP		SBK93121	MN	EVHA	03-JUN-93	0	3.75	UGL	SBK-93-121	DV3M*601
METALS IN WATER BY ICAP		SBK93121	MN	EVHA	03-JUN-93	0	3.22	UGL	SBK-93-121	DV3M*602
METALS IN WATER BY ICAP		SBK93121	MN	EVHA	03-JUN-93	0	3.22	UGL	SBK-93-121	DV3M*602

RINSATE BLANKS

USATHAMA Field		IRDMIS							
Method Code	Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
SS10	SBK93119	MN	EVBA	03-JUN-93	0	2.75	UGL	SBK-93-119	DV3M*600
	SBK93119	MN	EVBA	03-JUN-93	0	2.75	UGL	SBK-93-119	DV3M*600
	DV3F*641	MN	EVHA	24-JUN-93	0	2.75	UGL	SBK-93-123	DV3F*641
	SBK93123	MN	EVHA	24-JUN-93	0	2.75	UGL	SBK-93-123	DV3M*641
	SBK93124	MN	HX1A	23-SEP-93	0	2.75	UGL	SBK-93-124	DV3M*649
	SBK93123	MN	EVHA	24-JUN-93	0	2.75	UGL	SBK-93-123	DV3M*649
	SBK93124	MN	HX1A	23-SEP-93	0	2.75	UGL	SBK-93-124	DV3M*649
	SBK93119	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-119	DV3M*600
	SBK93120	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-120	DV3M*601
	SBK93121	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-121	DV3M*602
	SBK93118	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-118	DV3M*599
	SBK93123	NA	EVHA	24-JUN-93	0	500	UGL	SBK-93-123	DV3F*641
	SBK93124	NA	HX1A	23-SEP-93	0	500	UGL	SBK-93-124	DV3M*649
	SBK93121	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-121	DV3M*602
	SBK93120	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-120	DV3M*601
	SBK93119	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-119	DV3M*600
	SBK93118	NA	EVBA	03-JUN-93	0	500	UGL	SBK-93-118	DV3M*599
	SBK93119	N1	EVBA	03-JUN-93	0	34.3	UGL	SBK-93-119	DV3M*600
	SBK93118	N1	EVBA	03-JUN-93	0	34.3	UGL	SBK-93-118	DV3M*599
	SBK93121	N1	EVBA	03-JUN-93	0	34.3	UGL	SBK-93-121	DV3M*602
	SBK93123	N1	EVBA	24-JUN-93	0	34.3	UGL	SBK-93-123	DV3M*641
	SBK93124	N1	HX1A	23-SEP-93	0	34.3	UGL	SBK-93-124	DV3M*649
	SBK93121	N1	EVHA	24-JUN-93	0	34.3	UGL	SBK-93-121	DV3M*602
	DV3F*641	N1	EVHA	24-JUN-93	0	34.3	UGL	SBK-93-123	DV3F*641
	SBK93123	N1	EVHA	24-JUN-93	0	34.3	UGL	SBK-93-123	DV3M*641
	SBK93124	N1	HX1A	23-SEP-93	0	34.3	UGL	SBK-93-124	DV3M*649
	SBK93121	N1	EVBA	03-JUN-93	0	34.3	UGL	SBK-93-121	DV3M*602
	SBK93119	N1	EVBA	03-JUN-93	0	34.3	UGL	SBK-93-119	DV3M*600
SBK93120	N1	EVBA	03-JUN-93	0	34.3	UGL	SBK-93-120	DV3M*601	
SBK93118	N1	EVBA	03-JUN-93	0	34.3	UGL	SBK-93-118	DV3M*599	
SBK93119	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-119	DV3M*600	
SBK93120	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-120	DV3M*601	
SBK93118	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-118	DV3M*599	
SBK93119	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-119	DV3M*600	

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
SS10	SBK93121	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-121	DV3M*602
	SBK93123	V	EVBA	24-JUN-93	0	11	UGL	SBK-93-123	DV3M*641
	SBK93124	V	HX1A	23-SEP-93	0	11	UGL	SBK-93-124	DV3M*649
	DV3F*641	V	EVBA	24-JUN-93	0	11	UGL	SBK-93-123	DV3F*641
	SBK93123	V	EVBA	24-JUN-93	0	11	UGL	SBK-93-123	DV3M*641
	SBK93124	V	HX1A	23-SEP-93	0	11	UGL	SBK-93-124	DV3M*649
	SBK93121	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-121	DV3M*602
	SBK93120	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-120	DV3M*601
	SBK93118	V	EVBA	03-JUN-93	0	11	UGL	SBK-93-118	DV3M*599
	SBK93121	ZN	EVBA	03-JUN-93	0	21.1	UGL	SBK-93-121	DV3M*602
	SBK93119	ZN	EVBA	03-JUN-93	0	21.1	UGL	SBK-93-119	DV3M*600
	SBK93123	ZN	EVBA	24-JUN-93	0	21.1	UGL	SBK-93-123	DV3M*641
	SBK93121	ZN	EVBA	03-JUN-93	0	21.1	UGL	SBK-93-121	DV3M*602
	SBK93123	ZN	EVBA	24-JUN-93	0	21.1	UGL	SBK-93-123	DV3M*641
	SBK93124	ZN	HX1A	23-SEP-93	0	21.1	UGL	SBK-93-124	DV3M*649
	DV3F*641	ZN	EVBA	24-JUN-93	0	21.1	UGL	SBK-93-123	DV3F*641
	SBK93124	ZN	HX1A	23-SEP-93	0	21.1	UGL	SBK-93-124	DV3M*649
	SBK93120	ZN	EVBA	03-JUN-93	0	21.1	UGL	SBK-93-120	DV3M*601
	SBK93118	ZN	EVBA	03-JUN-93	0	21.1	UGL	SBK-93-118	DV3M*599
	SBK93119	ZN	EVBA	03-JUN-93	0	21.1	UGL	SBK-93-119	DV3M*600
	SBK93120	ZN	EVBA	03-JUN-93	0	21.1	UGL	SBK-93-120	DV3M*601
TF22	SBK93123	NIT	EGDA	24-JUN-93	0	10	UGL	SBK-93-123	DV3M*641
	SBK93123	NIT	EGDA	24-JUN-93	0	10	UGL	SBK-93-123	DV3M*641
TT10	SBK93123	CL	DEOA	24-JUN-93	0	2120	UGL	SBK-93-123	DV3M*641
	SBK93123	CL	DEOA	24-JUN-93	0	2120	UGL	SBK-93-123	DV3M*641
	SBK93123	SO4	DEOA	24-JUN-93	0	10000	UGL	SBK-93-123	DV3M*641
	SBK93123	SO4	DEOA	24-JUN-93	0	10000	UGL	SBK-93-123	DV3M*641
UH02	SBK93122	PCB016	CER	12-FEB-93	0	.16	UGL	SBK-93-122	V1AM*348
	SBK93122	PCB016	DPLA	11-JUN-93	0	.16	UGL	SBK-93-122	DV3M*640
	SBK93122	PCB016	DPLA	11-JUN-93	0	.16	UGL	SBK-93-122	DV3M*640
	SBK93122	PCB221	CER	12-FEB-93	0	.16	UGL	SBK-93-122	V1AM*348
	SBK93122	PCB221	DPLA	11-JUN-93	0	.16	UGL	SBK-93-122	DV3M*640
	SBK93122	PCB221	DPLA	11-JUN-93	0	.16	UGL	SBK-93-122	DV3M*640

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

Method Description	USATHAWA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
UH02		SBK93122	PCB232	CER	12-FEB-93	0	.16	UGL	SBK-93-122	V1A#348
		SBK93122	PCB232	DPLA	11-JUN-93	0	.16	UGL	SBK-93-122	DV3#640
		SBK93122	PCB232	DPLA	11-JUN-93	0	.16	UGL	SBK-93-122	DV3#640
		SBK93122	PCB242	CER	12-FEB-93	0	.19	UGL	SBK-93-122	V1A#348
		SBK93122	PCB242	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
		SBK93122	PCB242	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
		SBK93122	PCB248	CER	12-FEB-93	0	.19	UGL	SBK-93-122	V1A#348
		SBK93122	PCB248	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
		SBK93122	PCB248	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
		SBK93122	PCB254	CER	12-FEB-93	0	.19	UGL	SBK-93-122	V1A#348
		SBK93122	PCB254	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
		SBK93122	PCB254	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
		SBK93122	PCB260	CER	12-FEB-93	0	.19	UGL	SBK-93-122	V1A#348
		SBK93122	PCB260	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
		SBK93122	PCB260	DPLA	11-JUN-93	0	.19	UGL	SBK-93-122	DV3#640
UH13		SBK93122	ABHC	CXJA	12-FEB-93	0	.039	UGL	SBK-93-122	V1A#348
		SBK93122	ACLDAN	CXJA	12-FEB-93	0	.075	UGL	SBK-93-122	V1A#348
		SBK93122	AENSLF	CXJA	12-FEB-93	0	.023	UGL	SBK-93-122	V1A#348
		SBK93122	ALDRN	CXJA	12-FEB-93	0	.092	UGL	SBK-93-122	V1A#348
		SBK93122	BBHC	CXJA	12-FEB-93	0	.024	UGL	SBK-93-122	V1A#348
		SBK93122	BENSLF	CXJA	12-FEB-93	0	.023	UGL	SBK-93-122	V1A#348
		SBK93122	DBHC	CXJA	12-FEB-93	0	.029	UGL	SBK-93-122	V1A#348
		SBK93122	DLDRN	CXJA	12-FEB-93	0	.024	UGL	SBK-93-122	V1A#348
		SBK93122	ENDRN	CXJA	12-FEB-93	0	.024	UGL	SBK-93-122	V1A#348
		SBK93122	ENDRNA	CXJA	12-FEB-93	0	.029	UGL	SBK-93-122	V1A#348
		SBK93122	ENDRNK	CXJA	12-FEB-93	0	.029	UGL	SBK-93-122	V1A#348
		SBK93122	ESFSO4	CXJA	12-FEB-93	0	.079	UGL	SBK-93-122	V1A#348
		SBK93122	GCLDAN	CXJA	12-FEB-93	0	.075	UGL	SBK-93-122	V1A#348
		SBK93122	HPCL	CXJA	12-FEB-93	0	.042	UGL	SBK-93-122	V1A#348
		SBK93122	HPCLE	CXJA	12-FEB-93	0	.025	UGL	SBK-93-122	V1A#348
		SBK93122	ISODR	CXJA	12-FEB-93	0	.056	UGL	SBK-93-122	V1A#348
UH13		SBK93122	LJN	CXJA	12-FEB-93	0	.051	UGL	SBK-93-122	V1A#348
		SBK93122	MEXCLR	CXJA	12-FEB-93	0	.057	UGL	SBK-93-122	V1A#348
		SBK93122	PPDD	CXJA	12-FEB-93	0	.023	UGL	SBK-93-122	V1A#348
		SBK93122	PPDDE	CXJA	12-FEB-93	0	.027	UGL	SBK-93-122	V1A#348
UH13		SBK93122	PPDDT	CXJA	12-FEB-93	0	.034	UGL	SBK-93-122	V1A#348

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UH13	SBK93122	TXPHEN	CKJA	12-FEB-93	0	1.35	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS	UM18	SBK93123	124TCB	CKMA	12-FEB-93	0	1.8	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	124TCB	ETKA	24-JUN-93	0	1.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	124TCB	ETKA	24-JUN-93	0	1.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	12DCLB	CKMA	12-FEB-93	0	1.7	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	12DCLB	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	12DCLB	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	12DCLB	CKMA	12-FEB-93	0	2	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	12DCLB	ETKA	24-JUN-93	0	2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	12DCLB	ETKA	24-JUN-93	0	2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	13DCLB	CKMA	12-FEB-93	0	1.7	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	13DCLB	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	13DCLB	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	14DCLB	CKMA	12-FEB-93	0	1.7	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	14DCLB	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	14DCLB	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	245TCP	CKMA	12-FEB-93	0	5.2	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	245TCP	ETKA	24-JUN-93	0	5.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	245TCP	ETKA	24-JUN-93	0	5.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	246TCP	CKMA	12-FEB-93	0	4.2	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	246TCP	ETKA	24-JUN-93	0	4.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	246TCP	ETKA	24-JUN-93	0	4.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	24DCLP	CKMA	12-FEB-93	0	2.9	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	24DCLP	ETKA	24-JUN-93	0	2.9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	24DCLP	ETKA	24-JUN-93	0	2.9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	24DMPN	CKMA	12-FEB-93	0	5.8	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	24DMPN	ETKA	24-JUN-93	0	5.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	24DMPN	ETKA	24-JUN-93	0	5.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	24DNP	CKMA	12-FEB-93	0	21	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	24DNP	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	24DNP	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	24DNT	CKMA	12-FEB-93	0	4.5	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	24DNT	ETKA	24-JUN-93	0	4.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	24DNT	ETKA	24-JUN-93	0	4.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	26DNT	CKMA	12-FEB-93	0	.79	UGL	SBK-93-122	V1AN*348
BNA'S IN WATER BY GC/MS		SBK93123	26DNT	ETKA	24-JUN-93	0	.79	UGL	SBK-93-123	DV3M*641

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHANA Field Method Code	Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK93123	26DNT	ETKA	24-JUN-93	0	.79	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	2CLP	CKUA	12-FEB-93	0	.99	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	2CLP	ETKA	24-JUN-93	0	.99	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	2CLP	ETKA	24-JUN-93	0	.99	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	2CNAP	CKUA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	2CNAP	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	2CNAP	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	2E1HXL	CKUA	12-FEB-93	0	10	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93122	2HNP	CKUA	12-FEB-93	0	1.7	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	2HNP	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	2HNP	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	2NP	CKUA	12-FEB-93	0	3.9	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	2NP	ETKA	24-JUN-93	0	3.9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	2NP	ETKA	24-JUN-93	0	3.9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	2NANIL	CKUA	12-FEB-93	0	4.3	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	2NANIL	ETKA	24-JUN-93	0	4.3	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	2NANIL	ETKA	24-JUN-93	0	4.3	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	2NP	CKUA	12-FEB-93	0	3.7	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	2NP	ETKA	24-JUN-93	0	3.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	2NP	ETKA	24-JUN-93	0	3.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	33DCBD	CKUA	12-FEB-93	0	12	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	33DCBD	ETKA	24-JUN-93	0	12	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	33DCBD	ETKA	24-JUN-93	0	12	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	3NANIL	CKUA	12-FEB-93	0	4.9	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	3NANIL	ETKA	24-JUN-93	0	4.9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	3NANIL	ETKA	24-JUN-93	0	4.9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	46N2C	CKUA	12-FEB-93	0	17	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	46N2C	ETKA	24-JUN-93	0	17	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	46N2C	ETKA	24-JUN-93	0	17	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	4BRPPE	CKUA	12-FEB-93	0	4.2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	4BRPPE	ETKA	24-JUN-93	0	4.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	4BRPPE	ETKA	24-JUN-93	0	4.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	4CANIL	CKUA	12-FEB-93	0	7.3	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	4CANIL	ETKA	24-JUN-93	0	7.3	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	4CANIL	ETKA	24-JUN-93	0	7.3	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	4CL3C	CKUA	12-FEB-93	0	4	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	4CL3C	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK93123	4CL3C	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	4CLPPE	CKUA	12-FEB-93	0	5.1	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	4CLPPE	ETKA	24-JUN-93	0	5.1	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	4NP	CKUA	12-FEB-93	0	.52	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	4NP	ETKA	24-JUN-93	0	.52	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	4NANIL	CKUA	12-FEB-93	0	5.2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	4NANIL	ETKA	24-JUN-93	0	5.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	4NP	CKUA	12-FEB-93	0	12	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	4NP	ETKA	24-JUN-93	0	12	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ABHC	CKUA	12-FEB-93	0	4	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ABHC	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ACLDAN	CKUA	12-FEB-93	0	5.1	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ACLDAN	ETKA	24-JUN-93	0	5.1	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	AENSLF	CKUA	12-FEB-93	0	9.2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	AENSLF	ETKA	24-JUN-93	0	9.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ALDRN	CKUA	12-FEB-93	0	4.7	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ALDRN	ETKA	24-JUN-93	0	4.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ANAPNE	CKUA	12-FEB-93	0	1.7	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ANAPNE	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ANAPYL	CKUA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ANAPYL	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ANTRC	CKUA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ANTRC	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	B2CEXH	CKUA	12-FEB-93	0	1.5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	B2CEXH	ETKA	24-JUN-93	0	1.5	UGL	SBK-93-123	DV3M*641

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK93122	B2CIPE	CKWA	12-FEB-93	0	5.3	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93123	B2CIPE	ETKA	24-JUN-93	0	5.3	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	B2CIPE	CKWA	12-FEB-93	0	5.3	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	B2CLLE	ETKA	24-JUN-93	0	1.9	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93122	B2CLLE	CKWA	12-FEB-93	0	1.9	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	B2CLLE	ETKA	24-JUN-93	0	1.9	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	B2EHIP	ETKA	24-JUN-93	0	23	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	B2EHIP	CKWA	12-FEB-93	0	23	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	B2EHIP	CKWA	12-FEB-93	0	6.5	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93123	BAANTR	ETKA	24-JUN-93	0	1.6	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	BAANTR	CKWA	12-FEB-93	0	1.6	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	BAANTR	ETKA	24-JUN-93	0	4.7	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93122	BAPYR	CKWA	12-FEB-93	0	4.7	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	BAPYR	ETKA	24-JUN-93	0	4.7	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	BBFANT	CKWA	12-FEB-93	0	5.4	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93123	BBFANT	ETKA	24-JUN-93	0	5.4	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	BBFANT	CKWA	12-FEB-93	0	5.4	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	BBHC	ETKA	24-JUN-93	0	4	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93122	BBHC	CKWA	12-FEB-93	0	4	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	BBHC	ETKA	24-JUN-93	0	3.4	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93122	BBZP	CKWA	12-FEB-93	0	3.4	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	BBZP	ETKA	24-JUN-93	0	9.2	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93122	BENSLF	CKWA	12-FEB-93	0	9.2	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	BENSLF	ETKA	24-JUN-93	0	10	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93122	BENSLF	CKWA	12-FEB-93	0	10	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93123	BENZID	ETKA	24-JUN-93	0	13	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	BENZID	CKWA	12-FEB-93	0	13	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93123	BENZOA	ETKA	24-JUN-93	0	6.1	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	BENZOA	CKWA	12-FEB-93	0	6.1	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93123	BGHIPY	ETKA	24-JUN-93	0	6.1	UGL	SBK-93-123	DV3#641
BNA'S IN WATER BY GC/MS		SBK93122	BGHIPY	CKWA	12-FEB-93	0	6.1	UGL	SBK-93-122	V1A#348
BNA'S IN WATER BY GC/MS		SBK93123	BKFANT	ETKA	24-JUN-93	0	.87	UGL	SBK-93-123	DV3#641

RINSEATE BLANKS

USATHAMA Field		IRDMIS							
Method Code	Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
UM18	SBK93123	BK FANT	ETKA	24-JUN-93	0	.87	UGL	SBK-93-123	DV3M*641
	SBK93122	BK FANT	CKWA	12-FEB-93	0	.87	UGL	SBK-93-122	V1AM*348
	SBK93123	BZALC	ETKA	24-JUN-93	0	.72	UGL	SBK-93-123	DV3M*641
	SBK93122	BZALC	ETKA	24-JUN-93	0	.72	UGL	SBK-93-123	DV3M*641
	SBK93123	CARBZ	ETKA	24-JUN-93	0	1.5	UGL	SBK-93-123	DV3M*641
	SBK93122	CARBZ	CKWA	12-FEB-93	0	1.5	UGL	SBK-93-122	V1AM*348
	SBK93123	CARBZ	ETKA	24-JUN-93	0	2.4	UGL	SBK-93-123	DV3M*641
	SBK93122	CHRY	CKWA	12-FEB-93	0	2.4	UGL	SBK-93-122	V1AM*348
	SBK93123	CL68Z	ETKA	24-JUN-93	0	1.6	UGL	SBK-93-123	DV3M*641
	SBK93122	CL68Z	CKWA	12-FEB-93	0	1.6	UGL	SBK-93-122	V1AM*348
	SBK93123	CL6CP	ETKA	24-JUN-93	0	8.6	UGL	SBK-93-123	DV3M*641
	SBK93122	CL6CP	CKWA	12-FEB-93	0	8.6	UGL	SBK-93-122	V1AM*348
	SBK93123	CL6ET	ETKA	24-JUN-93	0	1.5	UGL	SBK-93-123	DV3M*641
	SBK93122	CL6ET	CKWA	12-FEB-93	0	1.5	UGL	SBK-93-122	V1AM*348
	SBK93123	DBAHA	ETKA	24-JUN-93	0	6.5	UGL	SBK-93-123	DV3M*641
	SBK93122	DBAHA	CKWA	12-FEB-93	0	6.5	UGL	SBK-93-122	V1AM*348
	SBK93123	DBHC	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
	SBK93122	DBHC	CKWA	12-FEB-93	0	4	UGL	SBK-93-122	V1AM*348
	SBK93123	DBZFUR	ETKA	24-JUN-93	0	1.7	UGL	SBK-93-123	DV3M*641
	SBK93122	DBZFUR	CKWA	12-FEB-93	0	1.7	UGL	SBK-93-122	V1AM*348
SBK93123	DEP	ETKA	24-JUN-93	0	2	UGL	SBK-93-123	DV3M*641	
SBK93122	DEP	CKWA	12-FEB-93	0	2	UGL	SBK-93-122	V1AM*348	
SBK93123	DLDRN	ETKA	24-JUN-93	0	4.7	UGL	SBK-93-123	DV3M*641	
SBK93122	DLDRN	CKWA	12-FEB-93	0	4.7	UGL	SBK-93-122	V1AM*348	
SBK93123	DMP	ETKA	24-JUN-93	0	1.5	UGL	SBK-93-123	DV3M*641	

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK93123	DMP	ETKA	24-JUN-93	0	1.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	DNBP	CKWA	12-FEB-93	0	3.7	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	DNBP	ETKA	24-JUN-93	0	3.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	DNBP	ETKA	24-JUN-93	0	3.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	DNBP	ETKA	24-JUN-93	0	15	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	DNBP	ETKA	24-JUN-93	0	15	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	DNBP	CKWA	12-FEB-93	0	15	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ENDRN	ETKA	24-JUN-93	0	7.6	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ENDRN	CKWA	12-FEB-93	0	7.6	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ENDRN	ETKA	24-JUN-93	0	7.6	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ENDRNA	CKWA	12-FEB-93	0	8	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ENDRNA	ETKA	24-JUN-93	0	8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ENDRNK	CKWA	12-FEB-93	0	8	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ENDRNK	ETKA	24-JUN-93	0	8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ENDRNK	CKWA	12-FEB-93	0	8	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ESFS04	ETKA	24-JUN-93	0	9.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ESFS04	CKWA	12-FEB-93	0	9.2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ESFS04	ETKA	24-JUN-93	0	3.3	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	FANT	CKWA	12-FEB-93	0	3.3	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	FANT	ETKA	24-JUN-93	0	3.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	FLRENE	CKWA	12-FEB-93	0	3.7	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	FLRENE	ETKA	24-JUN-93	0	3.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	FLRENE	CKWA	12-FEB-93	0	5.1	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	GCLDAN	ETKA	24-JUN-93	0	5.1	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	GCLDAN	CKWA	12-FEB-93	0	3.4	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	GCLDAN	ETKA	24-JUN-93	0	3.4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	HCBD	CKWA	12-FEB-93	0	3.4	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	HCBD	ETKA	24-JUN-93	0	2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	HPCL	CKWA	12-FEB-93	0	2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	HPCL	ETKA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	HPCL	CKWA	12-FEB-93	0	5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	HPCL	ETKA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK93123	ICDPYR	ETKA	24-JUN-93	0	8.6	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ICDPYR	CKWA	12-FEB-93	0	8.6	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	ICDPYR	ETKA	24-JUN-93	0	8.6	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	ISOPHR	ETKA	24-JUN-93	0	4.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	ISOPHR	ETKA	24-JUN-93	0	4.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	ISOPHR	CKWA	12-FEB-93	0	4.8	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	LAURIC	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	LAURIC	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	LIN	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	LIN	CKWA	12-FEB-93	0	4	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	LIN	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	MEXCLR	ETKA	24-JUN-93	0	5.1	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	MEXCLR	CKWA	12-FEB-93	0	5.1	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	MEXCLR	ETKA	24-JUN-93	0	5.1	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	NAP	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	NAP	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NAP	CKWA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NB	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	NB	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NB	CKWA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	4.4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	4.4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	4.4	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	3	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	3	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	21	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	21	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	21	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	21	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	NNDMEA	CKWA	12-FEB-93	0	21	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	NNDMEA	ETKA	24-JUN-93	0	21	UGL	SBK-93-123	DV3M*641

TableFS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6
RINSATE BLANKS

Method Description	USATHAMA Method Code	Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK93122	PCB232	CKWA	12-FEB-93	0	21	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PCB242	ETKA	24-FEB-93	0	30	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PCB242	CKWA	12-FEB-93	0	30	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PCB242	ETKA	24-JUN-93	0	30	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	PCB248	ETKA	24-JUN-93	0	30	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PCB248	CKWA	12-FEB-93	0	30	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PCB248	ETKA	24-JUN-93	0	30	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PCB254	CKWA	24-JUN-93	0	36	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PCB254	ETKA	24-JUN-93	0	36	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PCB260	CKWA	12-FEB-93	0	36	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PCB260	ETKA	24-JUN-93	0	36	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	PCP	ETKA	24-JUN-93	0	18	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PCP	CKWA	12-FEB-93	0	18	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PHANTR	ETKA	24-JUN-93	0	18	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	PHANTR	ETKA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PHENOL	CKWA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PHENOL	ETKA	24-JUN-93	0	9.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PHENOL	CKWA	12-FEB-93	0	9.2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PPDD	ETKA	24-JUN-93	0	4	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PPDD	CKWA	12-FEB-93	0	4	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PPDE	ETKA	24-JUN-93	0	4.7	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PPDE	CKWA	12-FEB-93	0	4.7	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PPDT	ETKA	24-JUN-93	0	9.2	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PPDT	CKWA	12-FEB-93	0	9.2	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PPDT	ETKA	24-JUN-93	0	2.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	PYR	CKWA	24-JUN-93	0	2.8	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	PYR	ETKA	24-JUN-93	0	2.8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	TPHEN	CKWA	24-JUN-93	0	36	UGL	SBK-93-122	V1AM*348
BNA'S IN WATER BY GC/MS		SBK93123	TPHEN	ETKA	24-JUN-93	0	36	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93122	TPHEN	CKWA	12-FEB-93	0	36	UGL	SBK-93-122	V1AM*348

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
BNA'S IN WATER BY GC/MS	UM18	SBK93123	UNK638	ETKA	24-JUN-93	0	20	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK638	ETKA	24-JUN-93	0	20	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK641	ETKA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK641	ETKA	24-JUN-93	0	5	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK642	ETKA	24-JUN-93	0	9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK642	ETKA	24-JUN-93	0	9	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK652	ETKA	24-JUN-93	0	8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK652	ETKA	24-JUN-93	0	8	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK666	ETKA	24-JUN-93	0	10	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK666	ETKA	24-JUN-93	0	10	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK682	ETKA	24-JUN-93	0	10	UGL	SBK-93-123	DV3M*641
BNA'S IN WATER BY GC/MS		SBK93123	UNK682	ETKA	24-JUN-93	0	10	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS	UM20	SBK93118	111TCE	DYZA	03-JUN-93	0	17	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93118	111TCE	DYZA	03-JUN-93	0	17	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	111TCE	DYZA	03-JUN-93	0	15	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93119	111TCE	DYZA	03-JUN-93	0	15	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93122	111TCE	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	111TCE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	111TCE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	112TCE	DDMA	12-FEB-93	0	1.2	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	112TCE	FGEA	24-JUN-93	0	1.2	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93119	112TCE	DYZA	03-JUN-93	0	1.2	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	112TCE	DYZA	03-JUN-93	0	1.2	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	112TCE	DYZA	03-JUN-93	0	1.2	UGL	SBK-93-123	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93119	112TCE	DYZA	03-JUN-93	0	1.2	UGL	SBK-93-119	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	112TCE	FGEA	24-JUN-93	0	1.2	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	112TCE	FGEA	24-JUN-93	0	1.2	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	11DCE	DDMA	12-FEB-93	0	.5	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	11DCE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	11DCE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-123	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	11DCE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	11DCE	DDMA	12-FEB-93	0	.68	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	11DCE	FGEA	24-JUN-93	0	.68	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	11DCE	DYZA	03-JUN-93	0	.68	UGL	SBK-93-118	DV3M*599

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

USATHAMA Field		IRDMIS							
Method Code	Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
UM20	SBK93119	1DCLF	DYZA	03-JUN-93	0	.68	UGL	SBK-93-119	DV3M*600
	SBK93119	1DCLF	DYZA	03-JUN-93	0	.68	UGL	SBK-93-119	DV3M*600
	SBK93118	1DCLF	DYZA	03-JUN-93	0	.68	UGL	SBK-93-118	DV3M*599
	SBK93122	1DCLF	FGEA	24-JUN-93	0	.68	UGL	SBK-93-123	DV3M*641
	SBK93123	1DCE	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
	SBK93123	1DCE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
	SBK93119	1DCE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
	SBK93118	1DCE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3M*600
	SBK93123	1DCE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
	SBK93118	1DCE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
	SBK93118	1DCE	DYZA	03-JUN-93	0	3.3	UGL	SBK-93-118	DV3M*599
	SBK93118	1DCE	DYZA	03-JUN-93	0	3.3	UGL	SBK-93-118	DV3M*599
	SBK93119	1DCE	DYZA	03-JUN-93	0	2	UGL	SBK-93-119	DV3M*600
	SBK93119	1DCE	DYZA	03-JUN-93	0	2	UGL	SBK-93-119	DV3M*600
	SBK93122	1DCE	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
	SBK93123	1DCE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
	SBK93123	1DCE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
	SBK93122	1DCLP	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
	SBK93118	1DCLP	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
	SBK93119	1DCLP	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3M*600
	SBK93118	1DCLP	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
	SBK93123	1DCLP	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
	SBK93123	1DCLP	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
	SBK93122	2CLEVE	DDMA	12-FEB-93	0	.71	UGL	SBK-93-122	V1AM*348
	SBK93118	2CLEVE	DYZA	03-JUN-93	0	.71	UGL	SBK-93-118	DV3M*599
	SBK93123	2CLEVE	FGEA	24-JUN-93	0	.71	UGL	SBK-93-119	DV3M*600
	SBK93123	2CLEVE	FGEA	24-JUN-93	0	.71	UGL	SBK-93-123	DV3M*641
	SBK93119	2CLEVE	DYZA	03-JUN-93	0	.71	UGL	SBK-93-123	DV3M*641
	SBK93118	2CLEVE	DYZA	03-JUN-93	0	.71	UGL	SBK-93-119	DV3M*600
	SBK93118	ACET	DYZA	03-JUN-93	0	23	UGL	SBK-93-118	DV3M*599
	SBK93118	ACET	DYZA	03-JUN-93	0	23	UGL	SBK-93-118	DV3M*599
	SBK93122	ACET	DDMA	12-FEB-93	0	21	UGL	SBK-93-122	V1AM*348
SBK93119	ACET	DYZA	03-JUN-93	0	20	UGL	SBK-93-119	DV3M*600	
SBK93119	ACET	DYZA	03-JUN-93	0	20	UGL	SBK-93-119	DV3M*600	

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
VOC'S IN WATER BY GC/MS	UM20	SBK93123	ACET	FGEA	24-JUN-93	0	13	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	ACET	FGEA	24-JUN-93	0	13	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	ACROLN	DDMA	12-FEB-93	0	100	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93118	ACROLN	DYZA	03-JUN-93	0	100	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	ACROLN	DYZA	03-JUN-93	0	100	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	ACROLN	FGEA	24-JUN-93	0	100	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	ACROLN	DYZA	03-JUN-93	0	100	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	ACROLN	DYZA	03-JUN-93	0	100	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	ACRYLO	FGEA	24-JUN-93	0	100	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	ACRYLO	DDMA	12-FEB-93	0	100	UGL	SBK-93-118	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93122	ACRYLO	DYZA	03-JUN-93	0	100	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	ACRYLO	DYZA	03-JUN-93	0	100	UGL	SBK-93-119	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	ACRYLO	DYZA	03-JUN-93	0	100	UGL	SBK-93-123	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	ACRYLO	FGEA	24-JUN-93	0	100	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	BRDCLM	DDMA	12-FEB-93	0	100	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	BRDCLM	DYZA	03-JUN-93	0	.59	UGL	SBK-93-119	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	BRDCLM	FGEA	24-JUN-93	0	.59	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	BRDCLM	DYZA	03-JUN-93	0	.59	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	BRDCLM	FGEA	24-JUN-93	0	.59	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	BRDCLM	DYZA	03-JUN-93	0	.59	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	BRDCLM	FGEA	24-JUN-93	0	.59	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	BRDCLM	DYZA	03-JUN-93	0	.59	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	C13DCP	DDMA	12-FEB-93	0	.58	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	C13DCP	DYZA	03-JUN-93	0	.58	UGL	SBK-93-119	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	C13DCP	FGEA	24-JUN-93	0	.58	UGL	SBK-93-123	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	C13DCP	DYZA	03-JUN-93	0	.58	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	C2AVE	DDMA	12-FEB-93	0	.58	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	C2AVE	DYZA	03-JUN-93	0	.58	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	C2AVE	FGEA	24-JUN-93	0	.58	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	C2AVE	DYZA	03-JUN-93	0	.58	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	C2AVE	DDMA	12-FEB-93	0	8.3	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	C2AVE	DYZA	03-JUN-93	0	8.3	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	C2AVE	FGEA	24-JUN-93	0	8.3	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	C2AVE	DYZA	03-JUN-93	0	8.3	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	C2AVE	DDMA	12-FEB-93	0	8.3	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	C2AVE	DYZA	03-JUN-93	0	8.3	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	C2AVE	FGEA	24-JUN-93	0	8.3	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	C2AVE	DYZA	03-JUN-93	0	8.3	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	C2AVE	DDMA	12-FEB-93	0	8.3	UGL	SBK-93-122	V1AM*348

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
VOC'S IN WATER BY GC/MS	UM20	SBK931122	C2H3CL	DDMA	12-FEB-93	0	2.6	UGL	SBK-93-122	V1A1M*348
VOC'S IN WATER BY GC/MS		SBK931118	C2H3CL	DY2A	03-JUN-93	0	2.6	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931119	C2H3CL	DY2A	03-JUN-93	0	2.6	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931119	C2H3CL	DY2A	03-JUN-93	0	2.6	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931118	C2H3CL	DY2A	03-JUN-93	0	2.6	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931123	C2H3CL	FGEA	24-JUN-93	0	2.6	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931123	C2H3CL	FGEA	24-JUN-93	0	2.6	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931122	C2H5CL	DDMA	12-FEB-93	0	1.9	UGL	SBK-93-122	V1A1M*348
VOC'S IN WATER BY GC/MS		SBK931118	C2H5CL	DY2A	03-JUN-93	0	1.9	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931119	C2H5CL	DY2A	03-JUN-93	0	1.9	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931123	C2H5CL	FGEA	24-JUN-93	0	1.9	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931123	C2H5CL	FGEA	24-JUN-93	0	1.9	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931119	C2H5CL	DY2A	03-JUN-93	0	1.9	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931118	C2H5CL	DY2A	03-JUN-93	0	1.9	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931122	C6H6	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1A1M*348
VOC'S IN WATER BY GC/MS		SBK931118	C6H6	DY2A	03-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931119	C6H6	DY2A	03-JUN-93	0	.5	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931119	C6H6	DY2A	03-JUN-93	0	.5	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931123	C6H6	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931118	C6H6	FGEA	24-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931123	C6H6	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931122	CCL3F	DDMA	12-FEB-93	0	1.4	UGL	SBK-93-122	V1A1M*348
VOC'S IN WATER BY GC/MS		SBK931118	CCL3F	DY2A	03-JUN-93	0	1.4	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931119	CCL3F	DY2A	03-JUN-93	0	1.4	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931123	CCL3F	FGEA	24-JUN-93	0	1.4	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931118	CCL3F	DY2A	03-JUN-93	0	1.4	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931119	CCL3F	DY2A	03-JUN-93	0	1.4	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931123	CCL3F	FGEA	24-JUN-93	0	1.4	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931122	CCL4	DDMA	12-FEB-93	0	.58	UGL	SBK-93-122	V1A1M*348
VOC'S IN WATER BY GC/MS		SBK931118	CCL4	DY2A	03-JUN-93	0	.58	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931119	CCL4	DY2A	03-JUN-93	0	.58	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931119	CCL4	DY2A	03-JUN-93	0	.58	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK931118	CCL4	FGEA	24-JUN-93	0	.58	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931123	CCL4	FGEA	24-JUN-93	0	.58	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK931118	CH2CL2	DY2A	03-JUN-93	0	2.9	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK931118	CH2CL2	DY2A	03-JUN-93	0	2.9	UGL	SBK-93-118	DV3M*599

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
VOC'S IN WATER BY GC/MS	UM20	SBK93119	CH2CL2	DYZA	03-JUN-93	0	2.5	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93119	CH2CL2	DYZA	03-JUN-93	0	2.5	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93122	CH2CL2	DDMA	12-FEB-93	0	2.3	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	CH2CL2	FGEA	24-JUN-93	0	2.3	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	CH2CL2	FGEA	24-JUN-93	0	2.3	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	CH3BR	DDMA	12-FEB-93	0	5.8	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	CH3BR	FGEA	24-JUN-93	0	5.8	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	CH3BR	FGEA	24-JUN-93	0	5.8	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	CH3BR	DYZA	03-JUN-93	0	5.8	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	CH3BR	DYZA	03-JUN-93	0	5.8	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	CH3BR	DYZA	03-JUN-93	0	5.8	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	CH3CL	DDMA	12-FEB-93	0	3.2	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	CH3CL	FGEA	24-JUN-93	0	3.2	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93119	CH3CL	FGEA	24-JUN-93	0	3.2	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	CH3CL	DYZA	03-JUN-93	0	3.2	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	CH3CL	DYZA	03-JUN-93	0	3.2	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93122	CHBR3	DDMA	12-FEB-93	0	2.6	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	CHBR3	FGEA	24-JUN-93	0	2.6	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93119	CHBR3	FGEA	24-JUN-93	0	2.6	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	CHBR3	DYZA	03-JUN-93	0	2.6	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	CHBR3	DYZA	03-JUN-93	0	2.6	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	CHCL3	DYZA	03-JUN-93	0	1.9	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	CHCL3	DYZA	03-JUN-93	0	1.9	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93122	CHCL3	DDMA	12-FEB-93	0	.56	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	CHCL3	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	CHCL3	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	CL2BZ	DDMA	12-FEB-93	0	10	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93122	CL2BZ	DYZA	03-JUN-93	0	10	UGL	SBK-93-122	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	CL2BZ	FGEA	24-JUN-93	0	10	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93119	CL2BZ	DYZA	03-JUN-93	0	10	UGL	SBK-93-119	DV3M*600

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IROMIS Site ID	Lab Number
VOC'S IN WATER BY GC/MS	UM20	SBK93118	CL2BZ	DYZA	03-JUN-93	0	10	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93119	CL2BZ	DYZA	03-JUN-93	0	10	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93123	CL2BZ	FGEA	24-JUN-93	0	10	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93122	CLC6H5	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AW*348
VOC'S IN WATER BY GC/MS		SBK93119	CLC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93118	CLC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93119	CLC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93123	CLC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93118	CLC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	CLC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93122	CS2	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AW*348
VOC'S IN WATER BY GC/MS		SBK93118	CS2	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93119	CS2	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93123	CS2	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93118	CS2	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	CS2	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93118	DBRCLM	DYZA	03-JUN-93	0	.67	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	DBRCLM	FGEA	24-JUN-93	0	.67	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93119	DBRCLM	DYZA	03-JUN-93	0	.67	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93118	DBRCLM	DYZA	03-JUN-93	0	.67	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	DBRCLM	FGEA	24-JUN-93	0	.67	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93119	DBRCLM	DDMA	12-FEB-93	0	.5	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93118	ETC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	ETC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93119	ETC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93118	ETC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	ETC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93119	MEC6H5	DDMA	12-FEB-93	0	4.2	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93118	MEC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	MEC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641
VOC'S IN WATER BY GC/MS		SBK93119	MEC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3W*600
VOC'S IN WATER BY GC/MS		SBK93118	MEC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3W*599
VOC'S IN WATER BY GC/MS		SBK93123	MEC6H5	DYZA	03-JUN-93	0	.5	UGL	SBK-93-123	DV3W*641

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RIMSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value	Value	Units	IRDMIS Site ID	Lab Number
VOC'S IN WATER BY GC/MS	UM20	SBK93123	MEC6H5	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	MEK	FGEA	24-JUN-93	0	6.4	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	MEK	DYZA	03-JUN-93	0	6.4	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	MEK	DYZA	03-JUN-93	0	6.4	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93119	MEK	DYZA	03-JUN-93	0	6.4	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	MEK	DYZA	03-JUN-93	0	6.4	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	MEK	FGEA	24-JUN-93	0	6.4	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	MEK	DDMA	12-FEB-93	0	6.4	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	MIBK	FGEA	24-JUN-93	0	3	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	MIBK	DDMA	12-FEB-93	0	3	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93118	MIBK	DYZA	03-JUN-93	0	3	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	MIBK	DYZA	03-JUN-93	0	3	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93119	MIBK	DYZA	03-JUN-93	0	3	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	MIBK	DYZA	03-JUN-93	0	3	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	MIBK	FGEA	24-JUN-93	0	3.6	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93123	MIBK	FGEA	24-JUN-93	0	3.6	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93119	MIBK	DYZA	03-JUN-93	0	3.6	UGL	SBK-93-119	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93118	MIBK	DYZA	03-JUN-93	0	3.6	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	MIBK	DYZA	03-JUN-93	0	3.6	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	MIBK	DDMA	12-FEB-93	0	3.6	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	STYR	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93118	STYR	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	STYR	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93119	STYR	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93123	STYR	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	STYR	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93119	T13DCP	DYZA	03-JUN-93	0	.7	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	T13DCP	DYZA	03-JUN-93	0	.7	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93119	T13DCP	DYZA	03-JUN-93	0	.7	UGL	SBK-93-119	DV3M*600
VOC'S IN WATER BY GC/MS		SBK93118	T13DCP	FGEA	24-JUN-93	0	.7	UGL	SBK-93-118	DV3M*599
VOC'S IN WATER BY GC/MS		SBK93123	T13DCP	DDMA	12-FEB-93	0	.7	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93122	T13DCP	DDMA	12-FEB-93	0	.7	UGL	SBK-93-122	V1AM*348
VOC'S IN WATER BY GC/MS		SBK93123	T13DCP	FGEA	24-JUN-93	0	.7	UGL	SBK-93-123	DV3M*641
VOC'S IN WATER BY GC/MS		SBK93119	TCLEA	DYZA	03-JUN-93	0	.51	UGL	SBK-93-119	DV3M*600

Table FS-5
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

RINSATE BLANKS

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Test Name	Lot	Sample Date	Spike Value <	Value	Units	IRDMIS Site ID	Lab Number
VOC'S IN WATER BY GC/MS	UM20	SBK93118	TCLEA	DYZA	03-JUN-93	0	.51	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93118	TCLEA	DYZA	03-JUN-93	0	.51	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93123	TCLEA	FGEA	24-JUN-93	0	.51	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93122	TCLEA	DDMA	12-FEB-93	0	.51	UGL	SBK-93-122	V1A14*348
VOC'S IN WATER BY GC/MS		SBK93123	TCLEA	FGEA	24-JUN-93	0	.51	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93119	TCLEA	DYZA	03-JUN-93	0	.51	UGL	SBK-93-119	DV314*600
VOC'S IN WATER BY GC/MS		SBK93119	TCLEE	DYZA	03-JUN-93	0	1.6	UGL	SBK-93-119	DV314*600
VOC'S IN WATER BY GC/MS		SBK93122	TCLEE	DDMA	12-FEB-93	0	1.6	UGL	SBK-93-122	V1A14*348
VOC'S IN WATER BY GC/MS		SBK93119	TCLEE	DYZA	03-JUN-93	0	1.6	UGL	SBK-93-119	DV314*600
VOC'S IN WATER BY GC/MS		SBK93123	TCLEE	FGEA	24-JUN-93	0	1.6	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93123	TCLEE	FGEA	24-JUN-93	0	1.6	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93118	TCLEE	DYZA	03-JUN-93	0	1.6	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93118	TCLEE	DYZA	03-JUN-93	0	1.6	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93119	TRCLE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV314*600
VOC'S IN WATER BY GC/MS		SBK93119	TRCLE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-119	DV314*600
VOC'S IN WATER BY GC/MS		SBK93122	TRCLE	DDMA	12-FEB-93	0	.5	UGL	SBK-93-122	V1A14*348
VOC'S IN WATER BY GC/MS		SBK93123	TRCLE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93118	TRCLE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93123	TRCLE	FGEA	24-JUN-93	0	.5	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93118	TRCLE	DYZA	03-JUN-93	0	.5	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93119	XYLEN	DYZA	03-JUN-93	0	.84	UGL	SBK-93-119	DV314*600
VOC'S IN WATER BY GC/MS		SBK93119	XYLEN	DYZA	03-JUN-93	0	.84	UGL	SBK-93-119	DV314*600
VOC'S IN WATER BY GC/MS		SBK93118	XYLEN	DYZA	03-JUN-93	0	.84	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93123	XYLEN	FGEA	24-JUN-93	0	.84	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93118	XYLEN	DYZA	03-JUN-93	0	.84	UGL	SBK-93-118	DV314*599
VOC'S IN WATER BY GC/MS		SBK93123	XYLEN	FGEA	24-JUN-93	0	.84	UGL	SBK-93-123	DV314*641
VOC'S IN WATER BY GC/MS		SBK93122	XYLEN	DDMA	12-FEB-93	0	.84	UGL	SBK-93-122	V1A14*348

TABLE FS-6
SUMMARY OF ANALYTES DETECTED IN QUALITY CONTROL SAMPLES
SUPPLEMENTAL SITE INVESTIGATION
GROUP 3,5 & 6
FORT DEVENS, MASSACHUSETTS

RINSATE BLANKS

Analyses	Frequency of Detection	Minimum Detection	Maximum Detection
<u>VOCs</u>			
1,1,1-Trichloroethene	2:4	15	17
1,2-Dichloroethane	2:4	2	3.3
Acetone	3:4	20	23
Methylene Chloride	2:4	2.5	2.9
Chloroform	3:4	0.6	1.7
Toluene	1:4	4.2	4.2
<u>SVOCs</u>			
2-Ethyl-1-hexanol	1:1	10	10
Bis(2-ethylhexyl)phthalate	2:2	6.5	23
Dodecanoic Acid	1:1	4	4
<u>PCBs</u>			
PCBs	0:2	ND	ND
<u>Inorganics</u>			
Cobalt	1:6	38.2	38.2
Chromium	1:6	8.8	8.8
Copper	4:6	8.3	25
Iron	3:6	78	180
Potassium	2:6	550	3300
Manganese	3:6	3.2	4.0
<u>Miscellaneous</u>			
Hardness	1:1	38000	38000
Total Petroleum Hydrocarbon	0:1	ND	ND
Total Suspended Solids	0:1	ND	ND
Bicarbonate	0:1	ND	ND
Nitrate/Nitrite	0:1	ND	ND
Chloride	0:1	ND	ND
Sulfate	0:1	ND	ND

Notes:

VOCs = Volatile Organic Compounds

SVOC = Semivolatile Organic Compounds

PCBs = Polychlorinated Biphenyls

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

MS/MSD

Method Description	USATHANA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
	00	HARD	MXG309X1	DV3M*558	FDPA	23-JUN-93	05-JUL-93	40000	40400 UGL	101.0	3.0
	00	HARD	MXG309X1	DV3M*558	FDPA	23-JUN-93	05-JUL-93	40000	40400 UGL	101.0	3.0
	00	HARD	MXG309X1	DV3M*558	FDPA	23-JUN-93	05-JUL-93	40000	39200 UGL	98.0	3.0
	00	HARD	MXG309X1	DV3M*558	FDPA	23-JUN-93	05-JUL-93	40000	39200 UGL	98.0	3.0

		avg								99.5	
		minimum								98.0	
		maximum								101.0	
	00	TPHC	SX210700	DV3S*564	FDCA	26-MAY-93	17-JUN-93	1560	1510 UGG	96.8	4.1
	00	TPHC	SX210700	DV3S*564	FDCA	26-MAY-93	17-JUN-93	1560	1510 UGG	96.8	4.1
	00	TPHC	SX210700	DV3S*564	FDCA	26-MAY-93	17-JUN-93	1560	1450 UGG	92.9	4.1
	00	TPHC	SX210700	DV3S*564	FDCA	26-MAY-93	17-JUN-93	1560	1450 UGG	92.9	4.1
	00	TPHC	BX440805	DV3S*623	FDHA	11-JUN-93	29-JUN-93	1250	1270 UGG	101.6	.0
	00	TPHC	BX440805	DV3S*623	FDHA	11-JUN-93	29-JUN-93	1250	1270 UGG	101.6	.0
	00	TPHC	BX440805	DV3S*623	FDHA	11-JUN-93	29-JUN-93	1250	1270 UGG	101.6	.0
	00	TPHC	BX440805	DV3S*623	FDHA	11-JUN-93	29-JUN-93	1250	1270 UGG	101.6	.0

		avg								98.2	
		minimum								92.9	
		maximum								101.6	
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	51700 UGL	109071.7	13.7
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	51700 UGL	109071.7	13.7
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	51000 UGL	107594.9	13.7
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	51000 UGL	107594.9	13.7
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	48000 UGL	101265.8	13.7
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	48000 UGL	101265.8	13.7
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	45000 UGL	94936.7	13.7
	99	ALK	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	47.4	45000 UGL	94936.7	13.7

		avg								103217.3	
		minimum								94936.7	
		maximum								109071.7	
	99	HCO3	MXG309X1	DV3M*558	FDVA	23-JUN-93	06-JUL-93	57.8	63100 UGL	109169.6	13.7

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

MS/MSD

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
	99	HC03	DV3M*558	FDVA	23-JUN-93	06-JUL-93	57.8	63100 UGL	109169.6	13.7
	99	HC03	MXG309X1		23-JUN-93	06-JUL-93	57.8	62200 UGL	107612.5	13.7
	99	HC03	MXG309X1		23-JUN-93	06-JUL-93	57.8	62200 UGL	107612.5	13.7
	99	HC03	MXG309X1		23-JUN-93	06-JUL-93	57.8	58500 UGL	101211.1	13.7
	99	HC03	MXG309X1		23-JUN-93	06-JUL-93	57.8	58500 UGL	101211.1	13.7
	99	HC03	MXG309X1		23-JUN-93	06-JUL-93	57.8	54900 UGL	94982.7	13.7
	99	HC03	MXG309X1		23-JUN-93	06-JUL-93	57.8	54900 UGL	94982.7	13.7

		avg							103243.9	
		minimum							94982.7	
		maximum							109169.6	
HG IN SOIL BY GFAA	JB01	HG	SX210700	EBUA	26-MAY-93	14-JUN-93	.556	2.9 UGG	521.6	.2
HG IN SOIL BY GFAA	JB01	HG	SX210700	EBUA	26-MAY-93	14-JUN-93	.555	2.9 UGG	522.5	.2
HG IN SOIL BY GFAA	JB01	HG	SX210700	EBUA	26-MAY-93	14-JUN-93	.556	2.9 UGG	521.6	.2
HG IN SOIL BY GFAA	JB01	HG	SX210700	EBUA	26-MAY-93	14-JUN-93	.555	2.9 UGG	522.5	.2

		avg							522.1	
		minimum							521.6	
		maximum							522.5	
SE IN SOIL BY GFAA	JD15	SE	SX210700	EDFA	26-MAY-93	15-JUN-93	5.55	3.19 UGG	57.5	10.7
SE IN SOIL BY GFAA	JD15	SE	SX210700	EDFA	26-MAY-93	15-JUN-93	5.55	3.19 UGG	57.5	10.7
SE IN SOIL BY GFAA	JD15	SE	SX210700	EDFA	26-MAY-93	15-JUN-93	5.54	2.86 UGG	51.6	10.7
SE IN SOIL BY GFAA	JD15	SE	SX210700	EDFA	26-MAY-93	15-JUN-93	5.54	2.86 UGG	51.6	10.7

		avg							54.6	
		minimum							51.6	
		maximum							57.5	
PB IN SOIL BY GFAA	JD17	PB	BX380203	CUMA	26-MAY-93	21-JUN-93	4.11	3.63 UGG	88.3	1.4
PB IN SOIL BY GFAA	JD17	PB	BX380203	CUMA	26-MAY-93	21-JUN-93	4.11	3.63 UGG	88.3	1.4
PB IN SOIL BY GFAA	JD17	PB	BX380203	CUMA	26-MAY-93	21-JUN-93	3.94	3.53 UGG	89.6	1.4
PB IN SOIL BY GFAA	JD17	PB	BX380203	CUMA	26-MAY-93	21-JUN-93	3.94	3.53 UGG	89.6	1.4

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

MS/MSD

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number			Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
PB IN SOIL BY GFAA	JD17	PB	BX381305			DV3S*520	CUXA	03-JUN-93	14-JUN-93	4.03	4.36	UGG	108.2	4.7
PB IN SOIL BY GFAA	JD17	PB	BX381305			DV3S*520	CUXA	03-JUN-93	14-JUN-93	4.03	4.36	UGG	108.2	4.7
PB IN SOIL BY GFAA	JD17	PB	BX381305			DV3S*520	CUXA	03-JUN-93	14-JUN-93	3.98	4.11	UGG	103.3	4.7
PB IN SOIL BY GFAA	JD17	PB	BX381305			DV3S*520	CUXA	03-JUN-93	14-JUN-93	3.98	4.11	UGG	103.3	4.7
PB IN SOIL BY GFAA	JD17	PB	BX381900			DV3S*537	CUXA	03-JUN-93	15-JUN-93	4.14	8.8	UGG	212.6	.5
PB IN SOIL BY GFAA	JD17	PB	BX381900			DV3S*537	CUXA	03-JUN-93	15-JUN-93	4.12	8.8	UGG	213.6	.5
PB IN SOIL BY GFAA	JD17	PB	BX381900			DV3S*537	CUXA	03-JUN-93	15-JUN-93	4.12	8.8	UGG	213.6	.5
PB IN SOIL BY GFAA	JD17	PB	BX381900			DV3S*537	CUXA	03-JUN-93	15-JUN-93	4.14	8.8	UGG	212.6	.5
PB IN SOIL BY GFAA	JD17	PB	BX381900			DV3S*564	CUXA	26-MAY-93	21-JUN-93	5.42	31	UGG	572.0	106.0
PB IN SOIL BY GFAA	JD17	PB	BX381900			DV3S*564	CUXA	26-MAY-93	21-JUN-93	5.42	31	UGG	572.0	106.0
PB IN SOIL BY GFAA	JD17	PB	BX381900			DV3S*564	CUXA	26-MAY-93	21-JUN-93	5.52	9.7	UGG	175.7	106.0
PB IN SOIL BY GFAA	JD17	PB	BX440805			DV3S*623	CUYA	11-JUN-93	08-JUL-93	4.36	3.2	UGG	73.4	13.7
PB IN SOIL BY GFAA	JD17	PB	BX440805			DV3S*623	CUYA	11-JUN-93	08-JUL-93	4.36	3.2	UGG	73.4	13.7
PB IN SOIL BY GFAA	JD17	PB	BX440805			DV3S*623	CUYA	11-JUN-93	08-JUL-93	4.36	2.79	UGG	64.0	13.7
PB IN SOIL BY GFAA	JD17	PB	BX440805			DV3S*623	CUYA	11-JUN-93	08-JUL-93	4.36	2.79	UGG	64.0	13.7

avg													170.1	
minimum													64.0	
maximum													572.0	
AS IN SOIL BY GFAA	JD19	AS	SX210700			DV3S*564	ELKA	26-MAY-93	14-JUN-93	5.54	4.2	UGG	75.8	30.3
AS IN SOIL BY GFAA	JD19	AS	SX210700			DV3S*564	ELKA	26-MAY-93	14-JUN-93	5.54	4.2	UGG	75.8	30.3
AS IN SOIL BY GFAA	JD19	AS	SX210700			DV3S*564	ELKA	26-MAY-93	14-JUN-93	5.55	3.1	UGG	55.9	30.3
AS IN SOIL BY GFAA	JD19	AS	SX210700			DV3S*564	ELKA	26-MAY-93	14-JUN-93	5.55	3.1	UGG	55.9	30.3
AS IN SOIL BY GFAA	JD19	AS	BX440805			DV3S*623	ELOA	11-JUN-93	13-JUL-93	4.38	4.8	UGG	109.6	33.1
AS IN SOIL BY GFAA	JD19	AS	BX440805			DV3S*623	ELOA	11-JUN-93	13-JUL-93	4.38	4.8	UGG	109.6	33.1
AS IN SOIL BY GFAA	JD19	AS	BX440805			DV3S*623	ELOA	11-JUN-93	13-JUL-93	4.37	3.43	UGG	78.5	33.1
AS IN SOIL BY GFAA	JD19	AS	BX440805			DV3S*623	ELOA	11-JUN-93	13-JUL-93	4.37	3.43	UGG	78.5	33.1

avg													79.9	
minimum													55.9	
maximum													109.6	
TL IN SOIL BY GFAA	JD24	TL	SX210700			DV3S*564	ZLX	26-MAY-93	15-JUN-93	5.54	6.05	UGG	109.2	1.2

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

MS/MSD

[illegible]

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

MS/NSD

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		minimum									
		maximum									
METALS IN SOIL BY ICAP	JS16	AL	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	279	2.35 UGG	52.7	
METALS IN SOIL BY ICAP	JS16	AL	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	277	2.35 UGG	93.4	.7
METALS IN SOIL BY ICAP	JS16	AL	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	277	2.35 UGG	.8	.7
METALS IN SOIL BY ICAP	JS16	AL	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	279	2.35 UGG	.8	.7
METALS IN SOIL BY ICAP	JS16	AL	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	213	692 UGG	324.9	100.0
METALS IN SOIL BY ICAP	JS16	AL	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	213	692 UGG	324.9	100.0
METALS IN SOIL BY ICAP	JS16	AL	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	217	235 UGG	108.3	100.0
METALS IN SOIL BY ICAP	JS16	AL	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	217	235 UGG	108.3	100.0

		avg									
		minimum									
		maximum									
METALS IN SOIL BY ICAP	JS16	BA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	83.7	88.5 UGG	105.7	7.6
METALS IN SOIL BY ICAP	JS16	BA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	83.7	88.5 UGG	105.7	7.6
METALS IN SOIL BY ICAP	JS16	BA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	83	81.3 UGG	98.0	7.6
METALS IN SOIL BY ICAP	JS16	BA	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	63.8	65.8 UGG	103.1	3.4
METALS IN SOIL BY ICAP	JS16	BA	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	63.8	65.8 UGG	103.1	3.4
METALS IN SOIL BY ICAP	JS16	BA	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	65	64.8 UGG	99.7	3.4
METALS IN SOIL BY ICAP	JS16	BA	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	65	64.8 UGG	99.7	3.4

		avg									
		minimum									
		maximum									
METALS IN SOIL BY ICAP	JS16	BE	BX381305	DV3S*520	EXBA	03-JUN-93	18-JUN-93	51.5	53.3 UGG	103.5	1.1
METALS IN SOIL BY ICAP	JS16	BE	BX381305	DV3S*520	EXBA	03-JUN-93	18-JUN-93	51.5	53.3 UGG	103.5	1.1
METALS IN SOIL BY ICAP	JS16	BE	BX381305	DV3S*520	EXBA	03-JUN-93	18-JUN-93	50.6	51.8 UGG	102.4	1.1
METALS IN SOIL BY ICAP	JS16	BE	BX381305	DV3S*520	EXBA	03-JUN-93	18-JUN-93	50.6	51.8 UGG	102.4	1.1
METALS IN SOIL BY ICAP	JS16	BE	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	69.3 UGG	99.4	.3
METALS IN SOIL BY ICAP	JS16	BE	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	69.3 UGG	99.4	.3
METALS IN SOIL BY ICAP	JS16	BE	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	68.9 UGG	99.7	.3
METALS IN SOIL BY ICAP	JS16	BE	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	68.9 UGG	99.7	.3

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

MS/MSD

Method Description	USATHANA Method Code	Test Name	IRDMIS Field			Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery		RPD
			Sample Number	Field Number	Test Name									
METALS IN SOIL BY ICAP	JS16	BE	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	UGG	101.3	.0			
METALS IN SOIL BY ICAP	JS16	BE	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	UGG	101.3	.0			
METALS IN SOIL BY ICAP	JS16	BE	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	UGG	101.3	.0			
METALS IN SOIL BY ICAP	JS16	BE	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	UGG	101.3	.0			

		avg								101.3				
		minimum								99.4				
		maximum								103.5				
METALS IN SOIL BY ICAP	JS16	CA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6970	UGG	98.3	.8			
METALS IN SOIL BY ICAP	JS16	CA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6970	UGG	98.3	.8			
METALS IN SOIL BY ICAP	JS16	CA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6910	UGG	97.5	.8			
METALS IN SOIL BY ICAP	JS16	CA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6910	UGG	97.5	.8			
METALS IN SOIL BY ICAP	JS16	CA	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	5410	UGG	94.6	.9			
METALS IN SOIL BY ICAP	JS16	CA	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	5410	UGG	94.6	.9			
METALS IN SOIL BY ICAP	JS16	CA	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	5310	UGG	95.5	.9			
METALS IN SOIL BY ICAP	JS16	CA	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	5310	UGG	95.5	.9			

		avg								96.5				
		minimum								94.6				
		maximum								98.3				
METALS IN SOIL BY ICAP	JS16	CD	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	UGG	100.0	.3			
METALS IN SOIL BY ICAP	JS16	CD	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	UGG	100.0	.3			
METALS IN SOIL BY ICAP	JS16	CD	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	UGG	100.3	.3			
METALS IN SOIL BY ICAP	JS16	CD	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	UGG	100.3	.3			
METALS IN SOIL BY ICAP	JS16	CD	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	UGG	103.1	.8			
METALS IN SOIL BY ICAP	JS16	CD	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	UGG	103.1	.8			
METALS IN SOIL BY ICAP	JS16	CD	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	UGG	104.0	.8			
METALS IN SOIL BY ICAP	JS16	CD	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	UGG	104.0	.8			

		avg								101.8				
		minimum								100.0				
		maximum								104.0				
METALS IN SOIL BY ICAP	JS16	CO	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	139	UGG	102.2	1.4			
METALS IN SOIL BY ICAP	JS16	CO	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	139	UGG	102.2	1.4			

TableFS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

MS/MSD

USATHAMA		IRDMIS		USATHAMA									
Method	Test	Field	Sample	Lab	Lot	Sample	Analysis	Spike	Value	Units	Percent	RPD	
Method Description				Code	Name	Number	Date	Value			Recovery	:	
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	
	JS16	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	BY	ICAP	

avg													
minimum													
maximum													
METALS IN SOIL BY ICAP													

TableFS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

MS/MSD

Method Description	USATHANA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD
METALS IN SOIL BY ICAP	JS16	maximum	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	104	UGG	107.5	5.5
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	104	UGG	149.2	5.5
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	97.6	UGG	149.2	5.5
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	97.6	UGG	141.2	5.5
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	61.9	UGG	116.6	12.2
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	61.9	UGG	116.6	12.2
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	55.8	UGG	103.1	12.2
METALS IN SOIL BY ICAP	JS16	*****	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	55.8	UGG	103.1	12.2
		avg										
		minimum										
		maximum										
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6970	7050	UGG	101.1	1.0
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6970	7050	UGG	101.1	1.0
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6910	6920	UGG	100.1	1.0
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	6910	6920	UGG	100.1	1.0
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	5410	5310	UGG	98.2	.3
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	5410	5310	UGG	98.2	.3
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	5310	5230	UGG	98.5	.3
METALS IN SOIL BY ICAP	JS16	*****	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	5310	5230	UGG	98.5	.3
		avg										
		minimum										
		maximum										
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	74.7	UGG	107.2	.5
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	74.7	UGG	107.2	.5
METALS IN SOIL BY ICAP	JS16		SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	74.4	UGG	107.7	.5
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	58	UGG	109.2	2.4
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	58	UGG	109.2	2.4
METALS IN SOIL BY ICAP	JS16		BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	57.7	UGG	106.7	2.4
METALS IN SOIL BY ICAP	JS16	*****	BX440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	57.7	UGG	106.7	2.4

TableFS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

MS/MSD

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
		avg									
		minimum									
		maximum									
METALS IN SOIL BY ICAP	JS16	V	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	66 UGG	94.7	1.4
METALS IN SOIL BY ICAP	JS16	V	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.7	66 UGG	94.7	1.4
METALS IN SOIL BY ICAP	JS16	V	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	64.5 UGG	93.3	1.4
METALS IN SOIL BY ICAP	JS16	V	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	69.1	64.5 UGG	93.3	1.4
METALS IN SOIL BY ICAP	JS16	V	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	56.7 UGG	106.8	5.6
METALS IN SOIL BY ICAP	JS16	V	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	53.1	56.7 UGG	106.8	5.6
METALS IN SOIL BY ICAP	JS16	V	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	54.6 UGG	100.9	5.6
METALS IN SOIL BY ICAP	JS16	V	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	54.1	54.6 UGG	100.9	5.6

		avg									
		minimum									
		maximum									
METALS IN SOIL BY ICAP	JS16	ZN	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	139	195 UGG	140.3	2.9
METALS IN SOIL BY ICAP	JS16	ZN	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	139	195 UGG	140.3	2.9
METALS IN SOIL BY ICAP	JS16	ZN	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	138	188 UGG	136.2	2.9
METALS IN SOIL BY ICAP	JS16	ZN	SX210700	DV3S*564	EXBA	26-MAY-93	18-JUN-93	138	188 UGG	136.2	2.9
METALS IN SOIL BY ICAP	JS16	ZN	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	106	114 UGG	107.5	1.9
METALS IN SOIL BY ICAP	JS16	ZN	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	106	114 UGG	107.5	1.9
METALS IN SOIL BY ICAP	JS16	ZN	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	108	114 UGG	105.6	1.9
METALS IN SOIL BY ICAP	JS16	ZN	8X440805	DV3S*623	EXCA	11-JUN-93	30-JUN-93	108	114 UGG	105.6	1.9

		avg									
		minimum									
		maximum									
METALS IN SOIL BY ICAP	LH16	CL10BP	8X440805	DV3S*623	DHFA	11-JUN-93	18-JUN-93	.067	.12 UGG	179.1	61.6
METALS IN SOIL BY ICAP	LH16	CL10BP	8X440805	DV3S*623	DHFA	11-JUN-93	18-JUN-93	.067	.12 UGG	179.1	61.6
METALS IN SOIL BY ICAP	LH16	CL10BP	8X440805	DV3S*623	DHFA	11-JUN-93	18-JUN-93	.067	.071 UGG	106.0	61.6
METALS IN SOIL BY ICAP	LH16	CL10BP	8X440805	DV3S*623	DHFA	11-JUN-93	18-JUN-93	.067	.067 UGG	106.0	61.6
METALS IN SOIL BY ICAP	LH16	CL10BP	8X440805	DV3S*623	DHFA	11-JUN-93	18-JUN-93	.067	.067 UGG	100.0	61.6
METALS IN SOIL BY ICAP	LH16	CL10BP	8X440805	DV3S*623	DHFA	11-JUN-93	18-JUN-93	.067	.067 UGG	100.0	61.6

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

MS/MSD

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Lab Number	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD

		avg						128.4	
		minimum						100.0	
		maximum						179.1	
		CL4XYL	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.067	.052 UGG	77.6
	LH16	CL4XYL	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.067	.052 UGG	77.6
	LH16	CL4XYL	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.067	.045 UGG	67.2
	LH16	CL4XYL	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.067	.044 UGG	65.7
	LH16	CL4XYL	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.067	.044 UGG	65.7

		avg						70.1	
		minimum						65.7	
		maximum						77.6	
		PCB016	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.297 UGG	101.7
	LH16	PCB016	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.297 UGG	101.7
	LH16	PCB016	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.234 UGG	80.1
	LH16	PCB016	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.234 UGG	80.1

		avg						90.9	
		minimum						80.1	
		maximum						101.7	
		PCB260	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.406 UGG	139.0
	LH16	PCB260	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.406 UGG	139.0
	LH16	PCB260	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.277 UGG	94.9
	LH16	PCB260	BX440805	DV3S*623 DHFA	11-JUN-93	18-JUN-93	.292	.277 UGG	94.9

		avg						117.0	
		minimum						94.9	
		maximum						139.0	
HG IN WATER BY CVAA	SB01	HG	MXG309X1	DV3W*558 FBBA	23-JUN-93	16-JUL-93	4	3.42 UGL	85.5
HG IN WATER BY CVAA	SB01	HG	MXG309X1	DV3W*558 FBBA	23-JUN-93	16-JUL-93	4	3.42 UGL	85.5

MS/MSD

USATHAMA		IRDMIS								
Method Code	Test Name	Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
SD22	AS IN WATER BY GFAA	MKG309X1	DV3M*558	ESJA	23-JUN-93	29-JUL-93	37.5	44.2 UGL	117.9	2.5
SD22	AS IN WATER BY GFAA	MKG309X1	DV3M*558	ESJA	23-JUN-93	29-JUL-93	37.5	44.2 UGL	117.9	2.5
SD22	AS IN WATER BY GFAA	MKG309X1	DV3M*558	ESJA	23-JUN-93	29-JUL-93	37.5	43.1 UGL	114.9	2.5
SD22	AS IN WATER BY GFAA	MKG309X1	DV3M*558	ESJA	23-JUN-93	29-JUL-93	37.5	43.1 UGL	114.9	2.5

		avg							116.4	
		minimum							114.9	
		maximum							117.9	
SD28	SB IN WATER BY GFAA	MKG309X1	DV3M*558	FRAA	23-JUN-93	30-JUL-93	80	77.1 UGL	96.4	2.6
SD28	SB IN WATER BY GFAA	MKG309X1	DV3M*558	FRAA	23-JUN-93	30-JUL-93	80	77.1 UGL	96.4	2.6
SD28	SB IN WATER BY GFAA	MKG309X1	DV3M*558	FRAA	23-JUN-93	30-JUL-93	80	75.1 UGL	93.9	2.6
SD28	SB IN WATER BY GFAA	MKG309X1	DV3M*558	FRAA	23-JUN-93	30-JUL-93	80	75.1 UGL	93.9	2.6

		avg							95.1	
		minimum							93.9	
		maximum							96.4	
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	50	50.3 UGL	100.6	2.4
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	50	50.3 UGL	100.6	2.4
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	50	49.1 UGL	98.2	2.4
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	50	49.1 UGL	98.2	2.4

		avg							99.4	
		minimum							98.2	
		maximum							100.6	
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	2000	2040 UGL	102.0	5.0
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	2000	2040 UGL	102.0	5.0
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	2000	1940 UGL	97.0	5.0
SS10	METALS IN WATER BY ICAP	MKG309X1	DV3M*558	EVHA	23-JUN-93	20-JUL-93	2000	1940 UGL	97.0	5.0

		avg							99.5	
		minimum							97.0	

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

MS/MSD

USATHAMA		IRDMIS											
Method Code	Test Name	Field Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery	RPD		

	Method Description												

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

MS/MSD

USATHAMA		IRDMIS			Percent			RPD		
Method	Test	Field	Sample	Lab	Analysis	Spike	Value	Units	Recovery	
Code	Name		Number	Lot	Date	Value				
Method Description										
SS10	CO	MXG309X1	DV3M*558	EVHA	23-JUN-93	500	548	UGL	109.6	.2
SS10	CO	MXG309X1	DV3M*558	EVHA	23-JUN-93	500	548	UGL	109.6	.2
SS10	CO	MXG309X1	DV3M*558	EVHA	23-JUN-93	500	547	UGL	109.4	.2
SS10	CO	MXG309X1	DV3M*558	EVHA	23-JUN-93	500	547	UGL	109.4	.2

avg										
minimum										
maximum										
SS10	CR	MXG309X1	DV3M*558	EVHA	23-JUN-93	200	198	UGL	99.0	.0
SS10	CR	MXG309X1	DV3M*558	EVHA	23-JUN-93	200	198	UGL	99.0	.0
SS10	CR	MXG309X1	DV3M*558	EVHA	23-JUN-93	200	198	UGL	99.0	.0
SS10	CR	MXG309X1	DV3M*558	EVHA	23-JUN-93	200	198	UGL	99.0	.0

avg										
minimum										
maximum										
SS10	CU	MXG309X1	DV3M*558	EVHA	23-JUN-93	250	248	UGL	99.2	.8
SS10	CU	MXG309X1	DV3M*558	EVHA	23-JUN-93	250	248	UGL	99.2	.8
SS10	CU	MXG309X1	DV3M*558	EVHA	23-JUN-93	250	246	UGL	98.4	.8
SS10	CU	MXG309X1	DV3M*558	EVHA	23-JUN-93	250	246	UGL	98.4	.8

avg										
minimum										
maximum										
SS10	FE	MXG309X1	DV3M*558	EVHA	23-JUN-93	1000	857	UGL	85.7	2.2
SS10	FE	MXG309X1	DV3M*558	EVHA	23-JUN-93	1000	857	UGL	85.7	2.2
SS10	FE	MXG309X1	DV3M*558	EVHA	23-JUN-93	1000	838	UGL	83.8	2.2
SS10	FE	MXG309X1	DV3M*558	EVHA	23-JUN-93	1000	838	UGL	83.8	2.2

avg										
minimum										
maximum										
SS10	FE	MXG309X1	DV3M*558	EVHA	23-JUN-93	1000	84.8		84.8	
SS10	FE	MXG309X1	DV3M*558	EVHA	23-JUN-93	1000	83.8		83.8	
SS10	FE	MXG309X1	DV3M*558	EVHA	23-JUN-93	1000	85.7		85.7	

Table FS-7
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

MS/MSD

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery	RPD
METALS IN WATER BY ICAP	SS10	K	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	11700 UGL	117.0	.9
METALS IN WATER BY ICAP	SS10	K	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	11700 UGL	117.0	.9
METALS IN WATER BY ICAP	SS10	K	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	11600 UGL	116.0	.9
METALS IN WATER BY ICAP	SS10	K	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	11600 UGL	116.0	.9

		avg								116.5	
		minimum								116.0	
		maximum								117.0	
METALS IN WATER BY ICAP	SS10	MG	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	9990 UGL	99.9	.2
METALS IN WATER BY ICAP	SS10	MG	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	9990 UGL	99.9	.2
METALS IN WATER BY ICAP	SS10	MG	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	9970 UGL	99.7	.2
METALS IN WATER BY ICAP	SS10	MG	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	9970 UGL	99.7	.2

		avg								99.8	
		minimum								99.7	
		maximum								99.9	
METALS IN WATER BY ICAP	SS10	MN	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	500	495 UGL	99.0	.2
METALS IN WATER BY ICAP	SS10	MN	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	500	495 UGL	99.0	.2
METALS IN WATER BY ICAP	SS10	MN	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	500	494 UGL	98.8	.2
METALS IN WATER BY ICAP	SS10	MN	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	500	494 UGL	98.8	.2

		avg								98.9	
		minimum								98.8	
		maximum								99.0	
METALS IN WATER BY ICAP	SS10	NA	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	10200 UGL	102.0	.0
METALS IN WATER BY ICAP	SS10	NA	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	10200 UGL	102.0	.0
METALS IN WATER BY ICAP	SS10	NA	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	10200 UGL	102.0	.0
METALS IN WATER BY ICAP	SS10	NA	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	10000	10200 UGL	102.0	.0

		avg								102.0	
		minimum								102.0	
		maximum								102.0	
METALS IN WATER BY ICAP	SS10	NI	MKG309X1	DV34M558	EVHA	23-JUN-93	20-JUL-93	500	565 UGL	113.0	1.1

TABLE FS-8
INORGANIC SOIL MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY
SUPPLEMENTAL SITE INVESTIGATION
GROUPS 3, 5 & 6
FORT DEVENS, MASSACHUSETTS

Sample ID	Analysis	% Recovery	RPD	Sample ID	Analysis	% Recovery	RPD
SX210700	Mercury	521.6	0.2	SX210700	Silver	52.7	37.0
SX210700	Mercury	522.5	0.2	SX210700	Aluminum	0.8	0.7
SX210700	Selenium	57.5	10.7	SX210700	Aluminum	0.8	0.7
SX210700	Selenium	51.6	10.7	BX440805	Aluminum	324.9	100.0
BX381900	Lead	212.6	0.5	BX440805	Iron	108.3	56.6
BX381900	Lead	213.6	0.5	SX210700	Iron	0.3	0.7
SX210700	Lead	572.0	106.0	SX210700	Iron	0.3	0.7
SX210700	Lead	175.7	106.0	BX440805	Iron	188.7	56.5
BX440805	Lead	73.4	13.7	SX210700	Manganese	141.2	5.5
BX440805	Lead	64.0	13.7	SX210700	Manganese	149.2	5.5
SX210700	Arsenic	55.9	30.3	SX210700	Zinc	140.3	2.9
SX210700	Antimony	64.0	11.9	SX210700	Zinc	136.2	2.9
SX210700	Antimony	56.8	11.9				

Note:

RPD = Relative Percent Recovery

TABLE FS-9
SAMPLE DUPLICATES OUTSIDE EPA REGION I RPD CRITERIA
SUPPLEMENTAL SITE INVESTIGATION
GROUP 3,5 & 6
FORT DEVENS MASSACHUSETTS

Analyte	Sample ID	Original	Duplicate	RPD
Soil (ug/g)				
<u>VOCs</u>				
Tetrachloroethylene	BDG61205	<0.0081	0.0028	110.2
<u>SVOCs</u>				
Fluoranthene	BD440905	<0.068	0.25	114.5
Phenanthrene	BD440905	<0.033	0.085	88.1
Pyrene	BD440905	<0.033	0.12	113.7
<u>Inorganics</u>				
Lead	BD381210	3.9	2.32	50.8
Aluminum	SD210600	1710	20000	168.5
Barium	SD210600	5.18	34.6	147.9
Beryllium	SD210600	<0.5	2.14	124.2
Calcium	SD210600	156	565	113.5
Cobalt	SD210600	1.42	6.34	126.8
Chromium	SD210600	<4.05	31.3	154.2
Copper	SD210600	2.66	17.9	148.2
Iron	SD210600	1630	17700	166.3
Potassium	SD210600	222	913	121.8
Magnesium	SD210600	293	3050	164.9
Manganese	SD210600	40.1	261	146.7
Nickel	SD210600	<1.71	17.3	164.0
Vanadium	SD210600	<3.39	29.2	158.4
Zinc	SD210600	<8.03	55.7	149.6
Aqueous ug/L				
<u>Inorganics</u>				
Lead	MDG308X2	4.01	2.28	55.0
Lead	MDG613X1	6.62	9.33	34.0
Aluminum	MDG308X2	253	<141	56.9
Copper	MDG308X2	13.6	<8.09	50.8
Iron	MDG308X2	334	132	86.7
Potassium	MDG308X2	706	1050	39.2

TABLE FS-9
SAMPLE DUPLICATES OUTSIDE EPA REGION I RPD CRITERIA
SUPPLEMENTAL SITE INVESTIGATION
GROUP 3,5 & 6
FORT DEVENS MASSACHUSETTS

Analyte	Sample ID	Original	Duplicate	RPD
<u>Miscellaneous</u>				
Hardness	MDG613X1	41800	1000	190.7
TSS	MDG613X1	617000	934000	40.9
Bicarbonate	MDG613X1	12200	6100	66.7

Notes:

ug/g = Microgram per gram

ug/L = Microgram per liter

RPD = Relative Percent Difference

VOCs = Volatile Organic Compounds

SVOCs = Semivolatile Organic Compounds

TSS = Total Suspended Solids

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
	00	HARD	MXG613X1	DV3M*586	FDPA	25-JUN-93	05-JUL-93	<	41800	UGL	190.7
	00	HARD	MDG613X1	DV3M*645	FDPA	25-JUN-93	05-JUL-93	<	1000	UGL	190.7
	00	TPHC	BD440905	DV3S*639	FDHA	10-JUN-93	29-JUN-93	<	38.1	UGG	28.8
	00	TPHC	BD440905	DV3S*627	FDHA	10-JUN-93	29-JUN-93	<	28.5	UGG	28.8
	00	TPHC	MDG613X1	DV3M*645	FDUA	25-JUN-93	09-JUL-93	<	188	UGL	3.2
	00	TPHC	MXG613X1	DV3M*586	FDUA	25-JUN-93	09-JUL-93	<	182	UGL	3.2
	00	TPHC	SK210600	DV3S*563	FDCA	26-MAY-93	17-JUN-93	<	163	UGG	49.8
	00	TPHC	SD210600	DV3S*592	FDCA	26-MAY-93	17-JUN-93	<	98	UGG	49.8
	00	TSS	MXG308X2	DV3M*557	IQUA	21-SEP-93	27-SEP-93	<	29000	UGL	18.5
	00	TSS	MXG308X2	DV3M*557	IQUA	21-SEP-93	27-SEP-93	<	28000	UGL	18.5
	00	TSS	MDG308X2	DV3M*647	IQUA	21-SEP-93	27-SEP-93	<	24000	UGL	18.5
	00	TSS	MDG613X1	DV3M*645	FDXA	25-JUN-93	29-JUN-93	<	934000	UGL	40.9
	00	TSS	MXG613X1	DV3M*586	FDXA	25-JUN-93	29-JUN-93	<	617000	UGL	40.9
	99	ALK	MXG308X2	DV3M*557	IJYA	21-SEP-93	27-SEP-93	<	6	UGL	18.2
	99	ALK	MDG308X2	DV3M*647	IJYA	21-SEP-93	27-SEP-93	<	5	UGL	18.2
	99	HCO3	MXG308X2	DV3M*557	IJYA	21-SEP-93	27-SEP-93	<	7.32	UGL	18.2
	99	HCO3	MDG308X2	DV3M*647	IJYA	21-SEP-93	27-SEP-93	<	6.1	UGL	18.2
	99	HCO3	MXG613X1	DV3M*586	FVYA	25-JUN-93	22-JUL-93	<	12200	UGL	66.7
	99	HCO3	MDG613X1	DV3M*645	FVYA	25-JUN-93	22-JUL-93	<	6100	UGL	66.7
HG IN SOIL BY GFAA	JB01	HG	SK210600	DV3S*563	EBUA	26-MAY-93	14-JUN-93	<	.352	UGG	23.5
HG IN SOIL BY GFAA	JB01	HG	SD210600	DV3S*592	EBUA	26-MAY-93	14-JUN-93	<	.278	UGG	23.5
SE IN SOIL BY GFAA	JD15	SE	SD210600	DV3S*592	EDFA	26-MAY-93	15-JUN-93	<	.25	UGG	.0
SE IN SOIL BY GFAA	JD15	SE	SK210600	DV3S*563	EDFA	26-MAY-93	15-JUN-93	<	.25	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
	Method Code	Test Name	Field Sample Number	Field Sample Number								
PB IN SOIL BY GFAA	JD17	PB	BD381210	DV3S*593	CUMA	26-MAY-93	21-JUN-93			2.32	UGG	50.8
PB IN SOIL BY GFAA	JD17	PB	BD381210	DV3S*518	CUMA	26-MAY-93	21-JUN-93			3.9	UGG	50.8
PB IN SOIL BY GFAA	JD17	PB	BD381805	DV3S*535	CUMA	03-JUN-93	14-JUN-93			3.32	UGG	32.2
PB IN SOIL BY GFAA	JD17	PB	BD381805	DV3S*597	CUMA	03-JUN-93	14-JUN-93			2.4	UGG	32.2
PB IN SOIL BY GFAA	JD17	PB	BD440905	DV3S*639	CUZA	10-JUN-93	07-JUL-93			4.19	UGG	28.6
PB IN SOIL BY GFAA	JD17	PB	BD440905	DV3S*627	CUZA	10-JUN-93	07-JUL-93			3.14	UGG	28.6
PB IN SOIL BY GFAA	JD17	PB	SX210600	DV3S*563	CUMA	26-MAY-93	21-JUN-93			53	UGG	40.9
PB IN SOIL BY GFAA	JD17	PB	SD210600	DV3S*592	CUMA	26-MAY-93	21-JUN-93			35	UGG	40.9
AS IN SOIL BY GFAA	JD19	AS	SX210600	DV3S*563	ELKA	26-MAY-93	14-JUN-93			26	UGG	3.9
AS IN SOIL BY GFAA	JD19	AS	SD210600	DV3S*592	ELKA	26-MAY-93	14-JUN-93			25	UGG	3.9
METALS IN SOIL BY ICAP	JS16	AG	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<		.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<		.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AL	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93			20000	UGG	168.5
METALS IN SOIL BY ICAP	JS16	AL	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93			1710	UGG	168.5
METALS IN SOIL BY ICAP	JS16	BA	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<		5.18	UGG	147.9
METALS IN SOIL BY ICAP	JS16	BA	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93			34.6	UGG	147.9
METALS IN SOIL BY ICAP	JS16	BE	BD381210	DV3S*593	EXBA	26-MAY-93	18-JUN-93			1.06	UGG	34.8
METALS IN SOIL BY ICAP	JS16	BE	BD381210	DV3S*518	EXBA	26-MAY-93	18-JUN-93			.746	UGG	34.8
METALS IN SOIL BY ICAP	JS16	BE	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93			2.14	UGG	124.2
METALS IN SOIL BY ICAP	JS16	BE	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<		.5	UGG	124.2
METALS IN SOIL BY ICAP	JS16	CA	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93			565	UGG	113.5
METALS IN SOIL BY ICAP	JS16	CA	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93			156	UGG	113.5
METALS IN SOIL BY ICAP	JS16	CD	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93			1.16	UGG	49.5

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Test Name	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Description	Field Sample Number	Field Sample Number									
JS16	ICAP	CD	SX210600	CD	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	.7	UGG	49.5
JS16	ICAP	CO	SD210600	CO	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	6.34	UGG	126.8
JS16	ICAP	CO	SX210600	CO	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	1.42	UGG	126.8
JS16	ICAP	CR	SX210600	CR	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	4.05	UGG	154.2
JS16	ICAP	CR	SD210600	CR	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	31.3	UGG	154.2
JS16	ICAP	CU	SX210600	CU	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	2.66	UGG	148.2
JS16	ICAP	CU	SD210600	CU	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	17.9	UGG	148.2
JS16	ICAP	FE	SD210600	FE	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	17700	UGG	166.3
JS16	ICAP	FE	SX210600	FE	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	1630	UGG	166.3
JS16	ICAP	K	SD210600	K	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	913	UGG	121.8
JS16	ICAP	K	SX210600	K	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	222	UGG	121.8
JS16	ICAP	MG	SD210600	MG	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	3050	UGG	164.9
JS16	ICAP	MG	SX210600	MG	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	293	UGG	164.9
JS16	ICAP	MN	SX210600	MN	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	40.1	UGG	146.7
JS16	ICAP	MN	SD210600	MN	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	261	UGG	146.7
JS16	ICAP	NA	SX210600	NA	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	367	UGG	21.8
JS16	ICAP	NA	SD210600	NA	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	295	UGG	21.8
JS16	ICAP	NI	SD210600	NI	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	17.3	UGG	164.0
JS16	ICAP	NI	SX210600	NI	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	1.71	UGG	164.0
JS16	ICAP	V	SX210600	V	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	3.39	UGG	158.4
JS16	ICAP	V	SD210600	V	DV3S*592	EXBA	26-MAY-93	18-JUN-93	<	29.2	UGG	158.4
JS16	ICAP	ZN	SX210600	ZN	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	8.03	UGG	149.6

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Field Sample Number									
JS16	ZN	SD210600	DV3S*592 EXBA	26-MAY-93	18-JUN-93	55.7	UGG	149.6				
LM18	124TCB	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.04	UGG	.0				
LM18	124TCB	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.04	UGG	.0				
LM18	120CLB	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.11	UGG	.0				
LM18	120CLB	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.11	UGG	.0				
LM18	120DPH	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.14	UGG	.0				
LM18	120DPH	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.14	UGG	.0				
LM18	130CLB	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.13	UGG	.0				
LM18	130CLB	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.13	UGG	.0				
LM18	140CLB	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.098	UGG	.0				
LM18	140CLB	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.098	UGG	.0				
LM18	245TCP	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.1	UGG	.0				
LM18	245TCP	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.1	UGG	.0				
LM18	246TCP	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.17	UGG	.0				
LM18	246TCP	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.17	UGG	.0				
LM18	240CLP	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.18	UGG	.0				
LM18	240CLP	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.18	UGG	.0				
LM18	240MPN	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	.69	UGG	.0				
LM18	240MPN	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	.69	UGG	.0				
LM18	240NP	BD440905	DV3S*639 EAPA	10-JUN-93	19-JUN-93	1.2	UGG	.0				
LM18	240NP	BX440905	DV3S*627 EAPA	10-JUN-93	18-JUN-93	1.2	UGG	.0				

Table PS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHANA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Sample Number							
BNA'S IN SOIL BY GC/MS	24DNT	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	24DNT	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	26DNT	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.085	UGG	.0
BNA'S IN SOIL BY GC/MS	26DNT	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.085	UGG	.0
BNA'S IN SOIL BY GC/MS	2CLP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.06	UGG	.0
BNA'S IN SOIL BY GC/MS	2CLP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.06	UGG	.0
BNA'S IN SOIL BY GC/MS	2CNAP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	2CNAP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	2NAP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.049	UGG	.0
BNA'S IN SOIL BY GC/MS	2NAP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.049	UGG	.0
BNA'S IN SOIL BY GC/MS	2NP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.029	UGG	.0
BNA'S IN SOIL BY GC/MS	2NP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.029	UGG	.0
BNA'S IN SOIL BY GC/MS	2NANIL	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.062	UGG	.0
BNA'S IN SOIL BY GC/MS	2NANIL	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.062	UGG	.0
BNA'S IN SOIL BY GC/MS	2NP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	2NP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.14	UGG	.0
BNA'S IN SOIL BY GC/MS	33DCBD	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	6.3	UGG	.0
BNA'S IN SOIL BY GC/MS	33DCBD	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	6.3	UGG	.0
BNA'S IN SOIL BY GC/MS	3NANIL	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.45	UGG	.0
BNA'S IN SOIL BY GC/MS	3NANIL	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.45	UGG	.0
BNA'S IN SOIL BY GC/MS	46DN2C	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.55	UGG	.0
BNA'S IN SOIL BY GC/MS	46DN2C	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.55	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Method Description								
LM18	ANAPNE	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.036	UGG	.0
LM18	ANAPNE	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.036	UGG	.0
LM18	ANAPYL	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.033	UGG	.0
LM18	ANAPYL	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	.0
LM18	ANTRC	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.033	UGG	.0
LM18	ANTRC	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	.0
LM18	B2CEXM	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.059	UGG	.0
LM18	B2CEXM	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.059	UGG	.0
LM18	B2CIPE	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.2	UGG	.0
LM18	B2CIPE	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.2	UGG	.0
LM18	B2CLEE	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.033	UGG	.0
LM18	B2CLEE	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	.0
LM18	B2EHP	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.62	UGG	.0
LM18	B2EHP	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.62	UGG	.0
LM18	BAANTR	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.17	UGG	.0
LM18	BAANTR	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.17	UGG	.0
LM18	BAPYR	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.25	UGG	.0
LM18	BAPYR	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.25	UGG	.0
LM18	BBFANT	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.21	UGG	.0
LM18	BBFANT	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.21	UGG	.0
LM18	BBHC	BD440905	BNA'S IN SOIL BY GC/MS	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.27	UGG	.0
LM18	BBHC	BX440905	BNA'S IN SOIL BY GC/MS	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.27	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Field		Sample		Lab		Sample		Analysis		Value		Units		RPD	
Method	Test	Method	Test	Code	Name	Code	Name	Code	Number	Code	Number	Date	Date	Code	Value	Code	Units	Code	RPD
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.17	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BBZP	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.17	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.62	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BENSLF	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.62	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.85	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BENZID	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.85	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	6.1	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BENZOA	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	6.1	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.25	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BGHIPI	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.25	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.066	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BKFANT	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.066	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.19	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	BZALC	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.19	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.1	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CARBZ	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.1	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.12	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CHRY	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.12	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.033	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CL6BZ	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	6.2	UGG	.0								
BNA'S IN SOIL BY GC/MS	LM18	CL6CP	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	6.2	UGG	.0								

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAWA		IRDMIS											
Method Code	Test Name	Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD			
LM18	CL6ET	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.15	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.15	UGG	.0			
LM18	DBAHA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.21	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.21	UGG	.0			
LM18	DBHC	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.27	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.27	UGG	.0			
LM18	DBZFUR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.035	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.035	UGG	.0			
LM18	DEP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.24	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.24	UGG	.0			
LM18	DLDRN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.31	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.31	UGG	.0			
LM18	DMP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.17	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.17	UGG	.0			
LM18	DNBP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.061	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.061	UGG	.0			
LM18	DNOP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.19	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.19	UGG	.0			
LM18	ENDRN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.45	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.45	UGG	.0			
LM18	ENDRNA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.53	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.53	UGG	.0			

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS		Method Description	Test Name	Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Field	Sample Number	Lab Number										
LM18	ENDRNK	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	ENDRNK	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.53	UGG	.0
LM18	ENDRNK	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	ENDRNK	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.53	UGG	.0
LM18	ESFS04	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	ESFS04	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.62	UGG	.0
LM18	ESFS04	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	ESFS04	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.62	UGG	.0
LM18	FANT	BD440905	DV3S*627	BNA'S IN SOIL BY GC/MS	FANT	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.068	UGG	114.5
LM18	FANT	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	FANT	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.25	UGG	114.5
LM18	FLRENE	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	FLRENE	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.033	UGG	.0
LM18	FLRENE	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	FLRENE	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.033	UGG	.0
LM18	GCLDAN	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	GCLDAN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.33	UGG	.0
LM18	GCLDAN	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	GCLDAN	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.33	UGG	.0
LM18	HCBD	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	HCBD	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.23	UGG	.0
LM18	HCBD	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	HCBD	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.23	UGG	.0
LM18	HPCL	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	HPCL	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.13	UGG	.0
LM18	HPCL	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	HPCL	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.13	UGG	.0
LM18	HPCL	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	HPCL	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.33	UGG	.0
LM18	HPCL	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	HPCL	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.33	UGG	.0
LM18	ICDPYR	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	ICDPYR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.29	UGG	.0
LM18	ICDPYR	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	ICDPYR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.29	UGG	.0
LM18	ISOPHR	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	ISOPHR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.033	UGG	.0
LM18	ISOPHR	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	ISOPHR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.033	UGG	.0
LM18	LIN	BD440905	DV3S*639	BNA'S IN SOIL BY GC/MS	LIN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.27	UGG	.0
LM18	LIN	BX440905	DV3S*627	BNA'S IN SOIL BY GC/MS	LIN	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.27	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS											
Method Code	Test Name	Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD			
LM18	MEXCLR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.33	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.33	UGG	.0			
LM18	NAP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.037	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.037	UGG	.0			
LM18	NB	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.045	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.045	UGG	.0			
LM18	NNDMEA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.14	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.14	UGG	.0			
LM18	NNDNPA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.2	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.2	UGG	.0			
LM18	NNDPA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.19	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.19	UGG	.0			
LM18	PCB016	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0			
		BX440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0			
LM18	PCB221	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0			
		BX440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0			
LM18	PCB232	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0			
		BX440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0			
LM18	PCB242	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0			
		BX440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0			
LM18	PCB248	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	2	UGG	.0			
		BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	2	UGG	.0			

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS											
Method Code	Test Name	Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD			
Method Description													
LM18	PCB254	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	2.3	UGG	.0			
LM18	PCB254	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	2.3	UGG	.0			
LM18	PCB260	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	2.6	UGG	.0			
LM18	PCB260	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	2.6	UGG	.0			
LM18	PCP	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.3	UGG	.0			
LM18	PCP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.3	UGG	.0			
LM18	PHANTR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.085	UGG	88.1			
LM18	PHANTR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	88.1			
LM18	PHENOL	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.11	UGG	.0			
LM18	PHENOL	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.11	UGG	.0			
LM18	PPDD	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.27	UGG	.0			
LM18	PPDD	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.27	UGG	.0			
LM18	PPDE	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.31	UGG	.0			
LM18	PPDE	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.31	UGG	.0			
LM18	PPDT	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.31	UGG	.0			
LM18	PPDT	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.31	UGG	.0			
LM18	PYR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	113.7			
LM18	PYR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.12	UGG	113.7			
LM18	TXPHEN	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	2.6	UGG	.0			
LM18	TXPHEN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	2.6	UGG	.0			
LM19	111TCE	BDGG1205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0044	UGG	.0			
LM19	111TCE	BXGG1205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0044	UGG	.0			

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS			Sample Date	Analysis Date	<	Value Units	RPD
			Field Sample Number	Lab Number	Lot					
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0054 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0054 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0039 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0039 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0023 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0023 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.003 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0029 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0029 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.01 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.01 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.017 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.1 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.1 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.1 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.1 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0029 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0029 UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Sample	Lab	Lot	Sample	Analysis		
Code	Name	Number	Number	Number	Number	Date	Date	<	RPD
Method Description									
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0032 UGG
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0032 UGG
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.032 UGG
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.032 UGG
VOC'S IN SOIL BY GC/MS	LM19	C2H3CL	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0062 UGG
VOC'S IN SOIL BY GC/MS	LM19	C2H3CL	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0062 UGG
VOC'S IN SOIL BY GC/MS	LM19	C2H5CL	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.012 UGG
VOC'S IN SOIL BY GC/MS	LM19	C2H5CL	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.012 UGG
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0015 UGG
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0015 UGG
VOC'S IN SOIL BY GC/MS	LM19	CCL3F	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0059 UGG
VOC'S IN SOIL BY GC/MS	LM19	CCL3F	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0059 UGG
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.007 UGG
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.007 UGG
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.012 UGG
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.012 UGG
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0057 UGG
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0057 UGG
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0088 UGG
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0088 UGG
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0069 UGG
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0069 UGG

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field			Lot	Sample Date	Analysis Date	<	Value	Units	RPD
			Sample Number	Lab Number	Number							
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.00087	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.00087	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.00086	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.00086	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.0044	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.0044	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.0031	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.0031	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.00078	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.00078	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.07	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.07	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.027	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.027	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	<	.0026	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	<	.0026	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field			Sample Date	Analysis Date	<	ue Units	RPD
			Sample Number	Lab Number	Lot					
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0024 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0024 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.00081 UGG	110.2
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0028 UGG	110.2
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0015 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0015 UGG	.0
HG IN WATER BY CVAA	SB01	HG	MXG308X2	DV3F*557	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
HG IN WATER BY CVAA	SB01	HG	MDG308X2	DV3F*647	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
HG IN WATER BY CVAA	SB01	HG	MDG308X2	DV3W*647	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
HG IN WATER BY CVAA	SB01	HG	MXG308X2	DV3W*557	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MXG308X2	DV3F*557	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MDG308X2	DV3F*647	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MDG308X2	DV3W*647	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MXG308X2	DV3W*557	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
PB IN WATER BY GFAA	SD20	PB	MXG308X2	DV3F*557	INGA	21-SEP-93	05-NOV-93	<	1.26 UGL	.0
PB IN WATER BY GFAA	SD20	PB	MDG308X2	DV3F*647	INGA	21-SEP-93	05-NOV-93	<	1.26 UGL	.0
PB IN WATER BY GFAA	SD20	PB	MDG308X2	DV3W*557	INGA	21-SEP-93	05-NOV-93	<	4.01 UGL	55.0
PB IN WATER BY GFAA	SD20	PB	MDG308X2	DV3W*647	INGA	21-SEP-93	05-NOV-93	<	2.28 UGL	55.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Lab	Lot	Sample	Analysis		Value	Units
Code	Name	Number	Number		Date	Date	<		
SD20	PB	MDG613X1	DV3M*645	EWGA	25-JUN-93	28-JUL-93		9.33	UGL
SD20	PB	MXG613X1	DV3M*586	EWGA	25-JUN-93	28-JUL-93		6.62	UGL
SE	SE	MXG308X2	DV3F*557	HNMA	21-SEP-93	04-NOV-93	<	3.02	UGL
SD21	SE	MXG308X2	DV3F*647	HNMA	21-SEP-93	04-NOV-93	<	3.02	UGL
SD21	SE	MXG308X2	DV3M*647	HNMA	21-SEP-93	04-NOV-93	<	3.02	UGL
SD21	SE	MXG308X2	DV3M*557	HNMA	21-SEP-93	04-NOV-93	<	3.02	UGL
SD22	AS	MXG308X2	DV3F*557	HOKA	21-SEP-93	05-NOV-93	<	2.54	UGL
SD22	AS	MXG308X2	DV3F*647	HOKA	21-SEP-93	05-NOV-93	<	2.54	UGL
SD22	AS	MXG308X2	DV3M*647	HOKA	21-SEP-93	05-NOV-93	<	2.54	UGL
SD22	AS	MXG308X2	DV3M*557	HOKA	21-SEP-93	05-NOV-93	<	2.54	UGL
SD28	SB	MXG308X2	DV3F*557	FRTA	21-SEP-93	05-NOV-93	<	3.03	UGL
SD28	SB	MXG308X2	DV3F*647	FRTA	21-SEP-93	04-NOV-93	<	3.03	UGL
SD28	SB	MXG308X2	DV3M*647	FRTA	21-SEP-93	05-NOV-93	<	3.03	UGL
SD28	SB	MXG308X2	DV3M*557	FRTA	21-SEP-93	05-NOV-93	<	3.03	UGL
SS10	AG	MXG308X2	DV3F*557	HXIA	21-SEP-93	15-OCT-93	<	4.6	UGL
SS10	AG	MXG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	4.6	UGL
SS10	AG	MXG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	4.6	UGL
SS10	AG	MXG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	4.6	UGL
SS10	AL	MXG308X2	DV3F*557	HXIA	21-SEP-93	15-OCT-93	<	141	UGL
SS10	AL	MXG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	141	UGL
SS10	AL	MXG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	253	UGL
SS10	AL	MXG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	141	UGL
SS10	BA	MXG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93		6.81	UGL

6.7

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAWA		IRDMIS		Field		Sample		Lab		Lot		Sample		Analysis		Value		Units		RPD	
Method	Test	Method	Test	Sample	Field	Sample	Field	Number	Test	Number	Test	Date	Field	Date	Test	Value	Test	Units	Field	RPD	
Code	Name	Code	Name	Number	Number	Number	Number														
SS10	ICAP	BA	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	BA	21-SEP-93	21-SEP-93	15-OCT-93	6.37	UGL	6.7						
	ICAP	BA	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	BA	21-SEP-93	21-SEP-93	15-OCT-93	8.26	UGL	16.9						
	ICAP	BA	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	BA	21-SEP-93	21-SEP-93	15-OCT-93	6.97	UGL	16.9						
SS10	ICAP	BE	MXG308X2	DV3F*647	MXG308X2	DV3F*647	MXG308X2	DV3F*647	BE	21-SEP-93	21-SEP-93	15-OCT-93	5	UGL	.0						
	ICAP	BE	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	BE	21-SEP-93	21-SEP-93	15-OCT-93	5	UGL	.0						
	ICAP	BE	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	BE	21-SEP-93	21-SEP-93	15-OCT-93	5	UGL	.0						
SS10	ICAP	BE	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	BE	21-SEP-93	21-SEP-93	15-OCT-93	5	UGL	.0						
	ICAP	BE	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	BE	21-SEP-93	21-SEP-93	15-OCT-93	5	UGL	.0						
	ICAP	BE	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	BE	21-SEP-93	21-SEP-93	15-OCT-93	5	UGL	.0						
SS10	ICAP	CA	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	CA	21-SEP-93	21-SEP-93	15-OCT-93	2650	UGL	5.4						
	ICAP	CA	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CA	21-SEP-93	21-SEP-93	15-OCT-93	2510	UGL	5.4						
	ICAP	CA	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CA	21-SEP-93	21-SEP-93	15-OCT-93	2440	UGL	.4						
SS10	ICAP	CA	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	CA	25-JUN-93	25-JUN-93	20-JUL-93	2430	UGL	.4						
	ICAP	CA	MXG613X1	DV3M*645	MXG613X1	DV3M*645	MXG613X1	DV3M*645	CA	25-JUN-93	25-JUN-93	20-JUL-93	15900	UGL	3.2						
	ICAP	CA	MXG613X1	DV3M*586	MXG613X1	DV3M*586	MXG613X1	DV3M*586	CA	25-JUN-93	25-JUN-93	20-JUL-93	15400	UGL	3.2						
SS10	ICAP	CD	MXG308X2	DV3F*647	MXG308X2	DV3F*647	MXG308X2	DV3F*647	CD	21-SEP-93	21-SEP-93	15-OCT-93	4.01	UGL	.0						
	ICAP	CD	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	CD	21-SEP-93	21-SEP-93	15-OCT-93	4.01	UGL	.0						
	ICAP	CD	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CD	21-SEP-93	21-SEP-93	15-OCT-93	4.01	UGL	.0						
SS10	ICAP	CD	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	CD	21-SEP-93	21-SEP-93	15-OCT-93	4.01	UGL	.0						
	ICAP	CD	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	CD	21-SEP-93	21-SEP-93	15-OCT-93	4.01	UGL	.0						
	ICAP	CD	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CD	21-SEP-93	21-SEP-93	15-OCT-93	4.01	UGL	.0						
SS10	ICAP	CO	MXG308X2	DV3F*647	MXG308X2	DV3F*647	MXG308X2	DV3F*647	CO	21-SEP-93	21-SEP-93	15-OCT-93	25	UGL	.0						
	ICAP	CO	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	CO	21-SEP-93	21-SEP-93	15-OCT-93	25	UGL	.0						
	ICAP	CO	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	CO	21-SEP-93	21-SEP-93	15-OCT-93	25	UGL	.0						
SS10	ICAP	CO	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CO	21-SEP-93	21-SEP-93	15-OCT-93	25	UGL	.0						
	ICAP	CO	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	CO	21-SEP-93	21-SEP-93	15-OCT-93	25	UGL	.0						
	ICAP	CO	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	CO	21-SEP-93	21-SEP-93	15-OCT-93	25	UGL	.0						
SS10	ICAP	CR	MXG308X2	DV3F*647	MXG308X2	DV3F*647	MXG308X2	DV3F*647	CR	21-SEP-93	21-SEP-93	15-OCT-93	6.02	UGL	.0						
	ICAP	CR	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	CR	21-SEP-93	21-SEP-93	15-OCT-93	6.02	UGL	.0						
	ICAP	CR	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CR	21-SEP-93	21-SEP-93	15-OCT-93	6.02	UGL	.0						
SS10	ICAP	CR	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	CR	21-SEP-93	21-SEP-93	15-OCT-93	6.02	UGL	.0						
	ICAP	CR	MXG308X2	DV3M*557	MXG308X2	DV3M*557	MXG308X2	DV3M*557	CR	21-SEP-93	21-SEP-93	15-OCT-93	6.02	UGL	.0						
	ICAP	CR	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CR	21-SEP-93	21-SEP-93	15-OCT-93	6.02	UGL	.0						
SS10	ICAP	CJ	MXG308X2	DV3F*647	MXG308X2	DV3F*647	MXG308X2	DV3F*647	CJ	21-SEP-93	21-SEP-93	15-OCT-93	8.09	UGL	.0						
	ICAP	CJ	MXG308X2	DV3F*557	MXG308X2	DV3F*557	MXG308X2	DV3F*557	CJ	21-SEP-93	21-SEP-93	15-OCT-93	8.09	UGL	.0						
	ICAP	CJ	MXG308X2	DV3M*647	MXG308X2	DV3M*647	MXG308X2	DV3M*647	CJ	21-SEP-93	21-SEP-93	15-OCT-93	8.09	UGL	.0						

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6
SAMPLE DUPLICATES

USATHAMA		FROMIS									
Method	Test	Field	Lab	Lot	Sample	Analysis	Value	Units	RPD		
Code	Name	Number	Number		Date	Date					
SS10	CU	MDG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	8.09	UGL	50.8	
SS10	CU	MDG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	13.6	UGL	50.8	
SS10	FE	MDG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	38.8	UGL	.0	
SS10	FE	MDG308X2	DV3F*557	HXIA	21-SEP-93	15-OCT-93	<	38.8	UGL	.0	
SS10	FE	MDG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	334	UGL	86.7	
SS10	FE	MDG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	132	UGL	86.7	
SS10	K	MDG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	1050	UGL	39.2	
SS10	K	MDG308X2	DV3F*557	HXIA	21-SEP-93	15-OCT-93	<	706	UGL	39.2	
SS10	K	MDG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	1240	UGL	29.7	
SS10	K	MDG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	919	UGL	29.7	
SS10	K	MDG613X1	DV3M*586	EVHA	25-JUN-93	20-JUL-93	<	4540	UGL	.0	
SS10	K	MDG613X1	DV3M*645	EVHA	25-JUN-93	20-JUL-93	<	4540	UGL	.0	
SS10	MG	MDG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG308X2	DV3F*557	HXIA	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG613X1	DV3M*586	EVHA	25-JUN-93	20-JUL-93	<	3720	UGL	4.7	
SS10	MG	MDG613X1	DV3M*645	EVHA	25-JUN-93	20-JUL-93	<	3550	UGL	4.7	
SS10	MN	MDG308X2	DV3F*557	HXIA	21-SEP-93	15-OCT-93	<	74.1	UGL	8.7	
SS10	MN	MDG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	67.9	UGL	8.7	
SS10	MN	MDG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	53.4	UGL	13.2	
SS10	MN	MDG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	46.8	UGL	13.2	
SS10	NA	MDG308X2	DV3F*557	HXIA	21-SEP-93	15-OCT-93	<	4790	UGL	7.8	
SS10	NA	MDG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	4430	UGL	7.8	
SS10	NA	MDG308X2	DV3M*647	HXIA	21-SEP-93	15-OCT-93	<	3000	UGL	17.8	
SS10	NA	MDG308X2	DV3M*557	HXIA	21-SEP-93	15-OCT-93	<	2510	UGL	17.8	
SS10	NI	MDG308X2	DV3F*647	HXIA	21-SEP-93	15-OCT-93	<	34.3	UGL	.0	

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS									
Method	Test	Field	Sample	Lab	Lot	Sample	Analysis	Value	Units	RPD	
Code	Name	Number	Number	Number	Number	Date	Date				
SS10	NI	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	34.3	UGL	.0	
SS10	NI	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	34.3	UGL	.0	
SS10	NI	MXG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	34.3	UGL	.0	
SS10	V	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	11	UGL	.0	
SS10	V	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	11	UGL	.0	
SS10	V	MXG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	11	UGL	.0	
SS10	V	MXG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	11	UGL	.0	
SS10	ZN	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	21.1	UGL	.0	
SS10	ZN	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	21.1	UGL	.0	
SS10	ZN	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	21.1	UGL	.0	
SS10	ZN	MXG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	21.1	UGL	.0	
TF22	NIT	MDG308X2	DV3M*647	EQRA	21-SEP-93	04-OCT-93		1300	UGL	16.7	
TF22	NIT	MXG308X2	DV3M*557	EQRA	21-SEP-93	04-OCT-93		1100	UGL	16.7	
TF22	NIT	MDG613X1	DV3M*645	EQDA	25-JUN-93	14-JUL-93		390	UGL	10.8	
TF22	NIT	MXG613X1	DV3M*586	EQDA	25-JUN-93	14-JUL-93		350	UGL	10.8	
TT10	CL	MXG308X2	DV3M*557	IOAA	21-SEP-93	28-SEP-93		2470	UGL	15.3	
TT10	CL	MDG308X2	DV3M*647	IOAA	21-SEP-93	28-SEP-93	<	2120	UGL	15.3	
TT10	CL	MDG613X1	DV3M*645	DEQA	25-JUN-93	14-JUL-93		29700	UGL	1.4	
TT10	CL	MXG613X1	DV3M*586	DEQA	25-JUN-93	14-JUL-93		29300	UGL	1.4	
TT10	SO4	MXG308X2	DV3M*557	IOAA	21-SEP-93	28-SEP-93	<	10000	UGL	.0	
TT10	SO4	MDG308X2	DV3M*647	IOAA	21-SEP-93	28-SEP-93	<	10000	UGL	.0	
TT10	SO4	MXG613X1	DV3M*586	DEQA	25-JUN-93	14-JUL-93		12700	UGL	1.6	
TT10	SO4	MDG613X1	DV3M*645	DEQA	25-JUN-93	14-JUL-93		12500	UGL	1.6	
UM18	124TCB	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	1.8	UGL	.0	

BNA'S IN WATER BY GC/MS

Table ES-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS		Method Description	Test Name	Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Field	Method Code	Field											
UM18		UM18		BNA'S IN WATER BY GC/MS	124TCB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.8	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	120CLB	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	120CLB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	120PH	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	120PH	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	130CLB	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	130CLB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	140CLB	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	140CLB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	245TCP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	245TCP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	246TCP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.2	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	246TCP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.2	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240CLP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2.9	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240CLP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2.9	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240MPN	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.8	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240MPN	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.8	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240NP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240NP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240NT	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.5	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	240NT	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.5	UGL	.0
UM18		UM18		BNA'S IN WATER BY GC/MS	260NT	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.79	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Method Description							
UM18	260NT	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	.79 UGL	.0
UM18	2CLP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	.99 UGL	.0
UM18	2CLP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	.99 UGL	.0
UM18	2CNAP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL	.0
UM18	2CNAP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL	.0
UM18	2WAP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	1.7 UGL	.0
UM18	2WAP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	1.7 UGL	.0
UM18	2WP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	3.9 UGL	.0
UM18	2WP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	3.9 UGL	.0
UM18	2NANIL	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	4.3 UGL	.0
UM18	2NANIL	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	4.3 UGL	.0
UM18	2NP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	3.7 UGL	.0
UM18	2NP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	3.7 UGL	.0
UM18	33DCBD	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	12 UGL	.0
UM18	33DCBD	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	12 UGL	.0
UM18	3NANIL	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	4.9 UGL	.0
UM18	3NANIL	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	4.9 UGL	.0
UM18	46DN2C	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	17 UGL	.0
UM18	46DN2C	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	17 UGL	.0
UM18	4BRPPE	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	4.2 UGL	.0
UM18	4BRPPE	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W#645	ETNA	25-JUN-93	14-JUL-93	<	4.2 UGL	.0
UM18	4CANIL	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W#586	ETNA	25-JUN-93	14-JUL-93	<	7.3 UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Sample	Lab	Lot	Sample	Analysis		Value	Units
Code	Name	Number	Number		Date	Date			
Description									RPD
BNA'S IN WATER BY GC/MS	4CANIL	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	7.3	UGL
BNA'S IN WATER BY GC/MS	4CL3C	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS	4CL3C	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS	4CLPPE	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS	4CLPPE	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS	4NP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.52	UGL
BNA'S IN WATER BY GC/MS	4NP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.52	UGL
BNA'S IN WATER BY GC/MS	4NANIL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS	4NANIL	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL
BNA'S IN WATER BY GC/MS	4NP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	12	UGL
BNA'S IN WATER BY GC/MS	4NP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	12	UGL
BNA'S IN WATER BY GC/MS	ABHC	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS	ABHC	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS	ACLDAN	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS	ACLDAN	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
BNA'S IN WATER BY GC/MS	AENSLF	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS	AENSLF	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL
BNA'S IN WATER BY GC/MS	ALDRN	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS	ALDRN	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS	ANAPNE	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS	ANAPNE	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL
BNA'S IN WATER BY GC/MS	ANAPYL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Sample	Lab	Lot	Sample	Analysis		
Code	Name	Number	Number	Number	Number	Date	Date		
Method Description								Value	Units
BNA'S IN WATER BY GC/MS	ANAPYL	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS	ANTRC	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS	ANTRC	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL
BNA'S IN WATER BY GC/MS	B2CEXM	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS	B2CEXM	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL
BNA'S IN WATER BY GC/MS	B2CIPE	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.3	UGL
BNA'S IN WATER BY GC/MS	B2CIPE	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.3	UGL
BNA'S IN WATER BY GC/MS	B2CLEE	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.9	UGL
BNA'S IN WATER BY GC/MS	B2CLEE	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.9	UGL
BNA'S IN WATER BY GC/MS	B2EHP	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS	B2EHP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.8	UGL
BNA'S IN WATER BY GC/MS	BAANTR	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS	BAANTR	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.6	UGL
BNA'S IN WATER BY GC/MS	BAPYR	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS	BAPYR	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL
BNA'S IN WATER BY GC/MS	BBFANT	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.4	UGL
BNA'S IN WATER BY GC/MS	BBFANT	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.4	UGL
BNA'S IN WATER BY GC/MS	BBHC	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS	BBHC	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
BNA'S IN WATER BY GC/MS	BBZP	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS	BBZP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	3.4	UGL
BNA'S IN WATER BY GC/MS	BENSLF	MDG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Field		Sample		Lab		Lot		Sample		Analysis		Value		Units		RPD	
Method	Test	Method	Test	Sample	Field	Number	Field	Number	Field	Number	Field	Date	Field	Date	Field	Field	Field	Field	Field	Field	Field
Code	Name	Code	Name	Number	Field	Code	Field	Code	Field	Code	Field	Date	Field	Date	Field	Field	Field	Field	Field	Field	Field
UM18	BENSLF	UM18	BENSLF	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	9.2	UGL	9.2	UGL	.0					
UM18	BENZID	UM18	BENZID	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	10	UGL	10	UGL	.0					
UM18	BENZID	UM18	BENZID	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	10	UGL	10	UGL	.0					
UM18	BENZOA	UM18	BENZOA	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	13	UGL	13	UGL	.0					
UM18	BENZOA	UM18	BENZOA	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	13	UGL	13	UGL	.0					
UM18	BGHIPI	UM18	BGHIPI	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	6.1	UGL	6.1	UGL	.0					
UM18	BGHIPI	UM18	BGHIPI	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	6.1	UGL	6.1	UGL	.0					
UM18	BKFANT	UM18	BKFANT	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	.87	UGL	.87	UGL	.0					
UM18	BKFANT	UM18	BKFANT	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	.87	UGL	.87	UGL	.0					
UM18	BZALC	UM18	BZALC	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	.72	UGL	.72	UGL	.0					
UM18	BZALC	UM18	BZALC	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	.72	UGL	.72	UGL	.0					
UM18	CARBAZ	UM18	CARBAZ	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	1.5	UGL	1.5	UGL	.0					
UM18	CARBAZ	UM18	CARBAZ	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	1.5	UGL	1.5	UGL	.0					
UM18	CHRY	UM18	CHRY	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	2.4	UGL	2.4	UGL	.0					
UM18	CHRY	UM18	CHRY	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	2.4	UGL	2.4	UGL	.0					
UM18	CL6BZ	UM18	CL6BZ	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	1.6	UGL	1.6	UGL	.0					
UM18	CL6BZ	UM18	CL6BZ	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	1.6	UGL	1.6	UGL	.0					
UM18	CL6CP	UM18	CL6CP	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	8.6	UGL	8.6	UGL	.0					
UM18	CL6CP	UM18	CL6CP	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	8.6	UGL	8.6	UGL	.0					
UM18	CL6ET	UM18	CL6ET	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	1.5	UGL	1.5	UGL	.0					
UM18	CL6ET	UM18	CL6ET	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	1.5	UGL	1.5	UGL	.0					
UM18	DBAHA	UM18	DBAHA	MXG613X1	MXG613X1	DV3M*586	ETNA	25-JUN-93	25-JUN-93	14-JUL-93	14-JUL-93	6.5	UGL	6.5	UGL	.0					

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAWA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Method Description								
UM18	DBAHA	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	6.5	UGL	.0
UM18	DBHC	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0
UM18	DBHC	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0
UM18	DBZFUR	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18	DBZFUR	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
UM18	DEP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0
UM18	DEP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0
UM18	DLDRN	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL	.0
UM18	DLDRN	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL	.0
UM18	DMP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL	.0
UM18	DMP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL	.0
UM18	DNBP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	3.7	UGL	.0
UM18	DNBP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	3.7	UGL	.0
UM18	DNOP	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	15	UGL	.0
UM18	DNOP	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	15	UGL	.0
UM18	ENDRN	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	7.6	UGL	.0
UM18	ENDRN	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	7.6	UGL	.0
UM18	ENDRNA	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	8	UGL	.0
UM18	ENDRNA	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	8	UGL	.0
UM18	ENDRNK	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	8	UGL	.0
UM18	ENDRNK	MDG613X1	BNA'S IN WATER BY GC/MS	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	8	UGL	.0
UM18	ESFS04	MXG613X1	BNA'S IN WATER BY GC/MS	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS		Test Name	Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Method Description	Field	Sample Number										
UM18	BNA'S IN WATER BY GC/MS	ESFS04	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	9.2	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	FANT	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	3.3	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	FANT	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	3.3	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	FLRENE	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	3.7	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	FLRENE	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	3.7	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	GCLDAN	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	5.1	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	GCLDAN	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	5.1	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	HCBD	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	3.4	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	HCBD	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	3.4	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	HPCL	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	2	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	HPCL	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	2	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	HPCLE	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	5	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	HPCLE	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	5	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	ICDPYR	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	8.6	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	ICDPYR	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	8.6	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	ISOPHR	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	4.8	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	ISOPHR	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	4.8	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	LIN	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	4	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	LIN	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	4	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	MEXCLR	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	5.1	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	MEXCLR	MDG613X1	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	<	5.1	UGL	.0
UM18	BNA'S IN WATER BY GC/MS	NAP	MDG613X1	MDG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	<	.5	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Analysis		Value		Units		RPD	
Method	Test	Field	Sample	Lab	Lot	Sample	Date	Date	Date	Date	Date
Code	Name	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Description	Description	Description	Description	Description	Description	Description	Description	Description	Description	Description	Description
BNA'S IN WATER BY GC/MS	NAP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL	.0	
BNA'S IN WATER BY GC/MS	NB	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL	.0	
BNA'S IN WATER BY GC/MS	NB	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL	.0	
BNA'S IN WATER BY GC/MS	NNDMEA	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0	
BNA'S IN WATER BY GC/MS	NNDMEA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0	
BNA'S IN WATER BY GC/MS	NNDNPA	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.4	UGL	.0	
BNA'S IN WATER BY GC/MS	NNDNPA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.4	UGL	.0	
BNA'S IN WATER BY GC/MS	NNDPA	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	3	UGL	.0	
BNA'S IN WATER BY GC/MS	NNDPA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	3	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB016	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB016	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB221	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB221	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB232	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB232	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB242	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	30	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB242	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	30	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB248	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	30	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB248	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	30	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB254	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	36	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB254	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	36	UGL	.0	
BNA'S IN WATER BY GC/MS	PCB260	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	36	UGL	.0	

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Groups 3, 5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Lab	Lot	Sample	Analysis		Value	Units
Code	Name	Number	Number		Date	Date	<		
Method Description									RPD
BNA'S IN WATER BY GC/MS	PCB260	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	36	UGL .0
BNA'S IN WATER BY GC/MS	PCP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	18	UGL .0
BNA'S IN WATER BY GC/MS	PCP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	18	UGL .0
BNA'S IN WATER BY GC/MS	PHANTR	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL .0
BNA'S IN WATER BY GC/MS	PHANTR	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL .0
BNA'S IN WATER BY GC/MS	PHENOL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL .0
BNA'S IN WATER BY GC/MS	PHENOL	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL .0
BNA'S IN WATER BY GC/MS	PPDDD	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL .0
BNA'S IN WATER BY GC/MS	PPDDD	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL .0
BNA'S IN WATER BY GC/MS	PPDDE	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL .0
BNA'S IN WATER BY GC/MS	PPDDE	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL .0
BNA'S IN WATER BY GC/MS	PPDDT	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL .0
BNA'S IN WATER BY GC/MS	PPDDT	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL .0
BNA'S IN WATER BY GC/MS	PYR	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	2.8	UGL .0
BNA'S IN WATER BY GC/MS	PYR	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	2.8	UGL .0
BNA'S IN WATER BY GC/MS	TXPHEN	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	36	UGL .0
BNA'S IN WATER BY GC/MS	TXPHEN	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	36	UGL .0
VOC'S IN WATER BY GC/MS	111TCE	MXG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.5	UGL .0
VOC'S IN WATER BY GC/MS	111TCE	MDG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.5	UGL .0
VOC'S IN WATER BY GC/MS	112TCE	MXG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	1.2	UGL .0
VOC'S IN WATER BY GC/MS	112TCE	MDG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	1.2	UGL .0

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Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Method Description							
UM20	11DCE	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.5	UGL	.0
UM20	11DCE	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.5	UGL	.0
UM20	11DCE	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.68	UGL	.0
UM20	11DCE	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.68	UGL	.0
UM20	12DCE	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.5	UGL	.0
UM20	12DCE	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.5	UGL	.0
UM20	12DCE	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.5	UGL	.0
UM20	12DCE	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.5	UGL	.0
UM20	12DCLP	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.5	UGL	.0
UM20	12DCLP	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.5	UGL	.0
UM20	2CLEVE	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.71	UGL	.0
UM20	2CLEVE	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.71	UGL	.0
UM20	ACET	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	13	UGL	.0
UM20	ACET	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	13	UGL	.0
UM20	ACROLN	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	100	UGL	.0
UM20	ACROLN	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	100	UGL	.0
UM20	ACRYLO	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	100	UGL	.0
UM20	ACRYLO	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	100	UGL	.0
UM20	BRDCLM	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.59	UGL	.0
UM20	BRDCLM	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.59	UGL	.0
UM20	C13DCP	MXG613X1	VOC'S IN WATER BY GC/MS	DV3W*645	FGGA	25-JUN-93	30-JUN-93	.58	UGL	.0
UM20	C13DCP	MDG613X1	VOC'S IN WATER BY GC/MS	DV3W*586	FGEA	25-JUN-93	28-JUN-93	.58	UGL	.0

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Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value Units		RPD
	Method Code	Test Name	Field Sample Number	Sample Number						Value	Units	
VOC'S IN WATER BY GC/MS	UM20	CL2BZ	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		10	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CL2BZ	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		10	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CLC6H5	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CLC6H5	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CS2	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CS2	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	DBRCLM	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		.67	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	DBRCLM	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		.67	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ETC6H5	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ETC6H5	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEC6H5	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEC6H5	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEK	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		6.4	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MEK	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		6.4	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		3	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		3	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		3.6	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	MIBK	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		3.6	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	STYR	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	STYR	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	T130CP	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<		.7	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	T130CP	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<		.7	UGL	.0

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SAMPLE DUPLICATES

USATHAMA		IRDMIS									
Method	Test	Field	Lab	Lot	Sample	Analysis	Value	Units	RPD		
Description	Name	Number	Number		Date	Date					
VOC'S IN WATER BY GC/MS	TCLEA	MDG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.51	UGL	.0	
VOC'S IN WATER BY GC/MS	TCLEA	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.51	UGL	.0	
VOC'S IN WATER BY GC/MS	TCLEE	MDG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	1.6	UGL	.0	
VOC'S IN WATER BY GC/MS	TCLEE	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	1.6	UGL	.0	
VOC'S IN WATER BY GC/MS	TRCLE	MDG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	TRCLE	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	XYLEN	MDG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.84	UGL	.0	
VOC'S IN WATER BY GC/MS	XYLEN	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.84	UGL	.0	

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SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Lab	Sample	Analysis				
Code	Name	Number	Number	Date	Date	Value	Units	RPD	
VOC'S IN WATER BY GC/MS	C2AVE	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	8.3	UGL	.0	
VOC'S IN WATER BY GC/MS	C2AVE	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	8.3	UGL	.0	
VOC'S IN WATER BY GC/MS	C2H3CL	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	2.6	UGL	.0	
VOC'S IN WATER BY GC/MS	C2H3CL	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	2.6	UGL	.0	
VOC'S IN WATER BY GC/MS	C2H5CL	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	1.9	UGL	.0	
VOC'S IN WATER BY GC/MS	C2H5CL	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	1.9	UGL	.0	
VOC'S IN WATER BY GC/MS	C6H6	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	C6H6	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	CCL3F	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	1.4	UGL	.0	
VOC'S IN WATER BY GC/MS	CCL3F	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	1.4	UGL	.0	
VOC'S IN WATER BY GC/MS	CCL4	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	.58	UGL	.0	
VOC'S IN WATER BY GC/MS	CCL4	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	.58	UGL	.0	
VOC'S IN WATER BY GC/MS	CH2CL2	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	2.3	UGL	.0	
VOC'S IN WATER BY GC/MS	CH2CL2	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	2.3	UGL	.0	
VOC'S IN WATER BY GC/MS	CH3BR	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	5.8	UGL	.0	
VOC'S IN WATER BY GC/MS	CH3BR	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	5.8	UGL	.0	
VOC'S IN WATER BY GC/MS	CH3CL	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	3.2	UGL	.0	
VOC'S IN WATER BY GC/MS	CH3CL	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	3.2	UGL	.0	
VOC'S IN WATER BY GC/MS	CHBR3	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	2.6	UGL	.0	
VOC'S IN WATER BY GC/MS	CHBR3	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	2.6	UGL	.0	
VOC'S IN WATER BY GC/MS	CHCL3	MD6613X1	DV3M*645	25-JUN-93	30-JUN-93	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	CHCL3	MXG613X1	DV3M*586	25-JUN-93	28-JUN-93	.5	UGL	.0	

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
	00	HARD	MXG613X1	DV3M*586	FDPA	25-JUN-93	05-JUL-93	<	41800	UGL	190.7
	00	HARD	MDG613X1	DV3M*645	FDPA	25-JUN-93	05-JUL-93	<	1000	UGL	190.7
	00	TPHC	BD440905	DV3S*639	FDHA	10-JUN-93	29-JUN-93	<	38.1	UGG	28.8
	00	TPHC	BD440905	DV3S*627	FDHA	10-JUN-93	29-JUN-93	<	28.5	UGG	28.8
	00	TPHC	MDG613X1	DV3M*645	FDUA	25-JUN-93	09-JUL-93	<	188	UGL	3.2
	00	TPHC	MXG613X1	DV3M*586	FDUA	25-JUN-93	09-JUL-93	<	182	UGL	3.2
	00	TPHC	SX210600	DV3S*563	FDCA	26-MAY-93	17-JUN-93	<	163	UGG	49.8
	00	TPHC	SD210600	DV3S*592	FDCA	26-MAY-93	17-JUN-93	<	98	UGG	49.8
	00	TSS	MXG308X2	DV3M*557	IQUA	21-SEP-93	27-SEP-93	<	29000	UGL	18.5
	00	TSS	MXG308X2	DV3M*557	IQUA	21-SEP-93	27-SEP-93	<	28000	UGL	18.5
	00	TSS	MDG308X2	DV3M*647	IQUA	21-SEP-93	27-SEP-93	<	24000	UGL	18.5
	00	TSS	MDG613X1	DV3M*645	FDXA	25-JUN-93	29-JUN-93	<	934000	UGL	40.9
	00	TSS	MXG613X1	DV3M*586	FDXA	25-JUN-93	29-JUN-93	<	617000	UGL	40.9
	99	ALK	MXG308X2	DV3M*557	IJYA	21-SEP-93	27-SEP-93	<	6	UGL	18.2
	99	ALK	MDG308X2	DV3M*647	IJYA	21-SEP-93	27-SEP-93	<	5	UGL	18.2
	99	HCO3	MXG308X2	DV3M*557	IJYA	21-SEP-93	27-SEP-93	<	7.32	UGL	18.2
	99	HCO3	MDG308X2	DV3M*647	IJYA	21-SEP-93	27-SEP-93	<	6.1	UGL	18.2
	99	HCO3	MXG613X1	DV3M*586	FVYA	25-JUN-93	22-JUL-93	<	12200	UGL	66.7
	99	HCO3	MDG613X1	DV3M*645	FVYA	25-JUN-93	22-JUL-93	<	6100	UGL	66.7
HG IN SOIL BY GFAA	JB01	HG	SX210600	DV3S*563	EBUA	26-MAY-93	14-JUN-93	<	.352	UGG	23.5
HG IN SOIL BY GFAA	JB01	HG	SD210600	DV3S*592	EBUA	26-MAY-93	14-JUN-93	<	.278	UGG	23.5
SE IN SOIL BY GFAA	JD15	SE	SD210600	DV3S*592	EDFA	26-MAY-93	15-JUN-93	<	.25	UGG	.0
SE IN SOIL BY GFAA	JD15	SE	SX210600	DV3S*563	EDFA	26-MAY-93	15-JUN-93	<	.25	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA		IRDMIS		Lot	Sample Date	Analysis Date	Value	Units	RPD
	Method Code	Test Name	Field Sample Number	Lab Number						
PB IN SOIL BY GFAA	JD17	PB	BD381210	DV3S*593	CUMA	26-MAY-93	21-JUN-93	2.32	UGG	50.8
PB IN SOIL BY GFAA	JD17	PB	BD381210	DV3S*518	CUMA	26-MAY-93	21-JUN-93	3.9	UGG	50.8
PB IN SOIL BY GFAA	JD17	PB	BD381805	DV3S*535	CUMA	03-JUN-93	14-JUN-93	3.32	UGG	32.2
PB IN SOIL BY GFAA	JD17	PB	BD381805	DV3S*597	CUMA	03-JUN-93	14-JUN-93	2.4	UGG	32.2
PB IN SOIL BY GFAA	JD17	PB	BD440905	DV3S*639	CUZA	10-JUN-93	07-JUL-93	4.19	UGG	28.6
PB IN SOIL BY GFAA	JD17	PB	BD440905	DV3S*627	CUZA	10-JUN-93	07-JUL-93	3.14	UGG	28.6
PB IN SOIL BY GFAA	JD17	PB	SX210600	DV3S*563	CUMA	26-MAY-93	21-JUN-93	53	UGG	40.9
PB IN SOIL BY GFAA	JD17	PB	SD210600	DV3S*592	CUMA	26-MAY-93	21-JUN-93	35	UGG	40.9
AS IN SOIL BY GFAA	JD19	AS	SX210600	DV3S*563	ELKA	26-MAY-93	14-JUN-93	26	UGG	3.9
AS IN SOIL BY GFAA	JD19	AS	SD210600	DV3S*592	ELKA	26-MAY-93	14-JUN-93	25	UGG	3.9
METALS IN SOIL BY ICAP	JS16	AG	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93	.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AG	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	.589	UGG	.0
METALS IN SOIL BY ICAP	JS16	AL	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93	20000	UGG	168.5
METALS IN SOIL BY ICAP	JS16	AL	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	1710	UGG	168.5
METALS IN SOIL BY ICAP	JS16	BA	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	5.18	UGG	147.9
METALS IN SOIL BY ICAP	JS16	BA	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93	34.6	UGG	147.9
METALS IN SOIL BY ICAP	JS16	BE	BD381210	DV3S*593	EXBA	26-MAY-93	18-JUN-93	1.06	UGG	34.8
METALS IN SOIL BY ICAP	JS16	BE	BD381210	DV3S*518	EXBA	26-MAY-93	18-JUN-93	.746	UGG	34.8
METALS IN SOIL BY ICAP	JS16	BE	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93	2.14	UGG	124.2
METALS IN SOIL BY ICAP	JS16	BE	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	.5	UGG	124.2
METALS IN SOIL BY ICAP	JS16	CA	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93	565	UGG	113.5
METALS IN SOIL BY ICAP	JS16	CA	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	156	UGG	113.5
METALS IN SOIL BY ICAP	JS16	CD	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93	1.16	UGG	49.5

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Installation: Fort Devens, MA (DV)
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SAMPLE DUPLICATES

USATHAMA		IRDMIS								
Method Code	Test Name	Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Description										
JS16	CD	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	.7	UGG	49.5
JS16	CO	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		6.34	UGG	126.8
JS16	CO	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	1.42	UGG	126.8
JS16	CR	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	4.05	UGG	154.2
JS16	CR	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		31.3	UGG	154.2
JS16	CU	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93		2.66	UGG	148.2
JS16	CU	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		17.9	UGG	148.2
JS16	FE	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		17700	UGG	166.3
JS16	FE	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93		1630	UGG	166.3
JS16	K	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		913	UGG	121.8
JS16	K	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93		222	UGG	121.8
JS16	MG	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		3050	UGG	164.9
JS16	MG	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93		293	UGG	164.9
JS16	MN	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93		40.1	UGG	146.7
JS16	MN	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		261	UGG	146.7
JS16	NA	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93		367	UGG	21.8
JS16	NA	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		295	UGG	21.8
JS16	NI	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		17.3	UGG	164.0
JS16	NI	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	1.71	UGG	164.0
JS16	V	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	3.39	UGG	158.4
JS16	V	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		29.2	UGG	158.4
JS16	ZN	SX210600	DV3S*563	EXBA	26-MAY-93	18-JUN-93	<	8.03	UGG	149.6

Table FS-10
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Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Field Sample Number								
JS16	ZN	SD210600	SD210600	DV3S*592	EXBA	26-MAY-93	18-JUN-93		55.7	UGG	149.6
LM18	124TCB	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.04	UGG	.0
LM18	124TCB	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.04	UGG	.0
LM18	120CLB	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.11	UGG	.0
LM18	120CLB	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.11	UGG	.0
LM18	120DPH	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.14	UGG	.0
LM18	120DPH	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.14	UGG	.0
LM18	130CLB	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.13	UGG	.0
LM18	130CLB	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.13	UGG	.0
LM18	140CLB	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.098	UGG	.0
LM18	140CLB	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.098	UGG	.0
LM18	245TCP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.1	UGG	.0
LM18	245TCP	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.1	UGG	.0
LM18	246TCP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.17	UGG	.0
LM18	246TCP	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.17	UGG	.0
LM18	240CLP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.18	UGG	.0
LM18	240CLP	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.18	UGG	.0
LM18	240MPN	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.69	UGG	.0
LM18	240MPN	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.69	UGG	.0
LM18	240NP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.2	UGG	.0
LM18	240NP	BD440905	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.2	UGG	.0

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SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Lab	Sample	Analysis	Value	Units	RPD	
Code	Name	Number	Number	Date	Date				
LM18	24DNT	BD440905	DV3S*639	EAPA	10-JUN-93	<	.14	UGG	.0
LM18	24DNT	BX440905	DV3S*627	EAPA	10-JUN-93	<	.14	UGG	.0
LM18	26DNT	BD440905	DV3S*639	EAPA	10-JUN-93	<	.085	UGG	.0
LM18	26DNT	BX440905	DV3S*627	EAPA	10-JUN-93	<	.085	UGG	.0
LM18	2CLP	BD440905	DV3S*639	EAPA	10-JUN-93	<	.06	UGG	.0
LM18	2CLP	BX440905	DV3S*627	EAPA	10-JUN-93	<	.06	UGG	.0
LM18	2CNAP	BD440905	DV3S*639	EAPA	10-JUN-93	<	.036	UGG	.0
LM18	2CNAP	BX440905	DV3S*627	EAPA	10-JUN-93	<	.036	UGG	.0
LM18	2MNP	BD440905	DV3S*639	EAPA	10-JUN-93	<	.049	UGG	.0
LM18	2MNP	BX440905	DV3S*627	EAPA	10-JUN-93	<	.049	UGG	.0
LM18	2NP	BD440905	DV3S*639	EAPA	10-JUN-93	<	.029	UGG	.0
LM18	2NP	BX440905	DV3S*627	EAPA	10-JUN-93	<	.029	UGG	.0
LM18	2NANIL	BD440905	DV3S*639	EAPA	10-JUN-93	<	.062	UGG	.0
LM18	2NANIL	BX440905	DV3S*627	EAPA	10-JUN-93	<	.062	UGG	.0
LM18	2NP	BD440905	DV3S*639	EAPA	10-JUN-93	<	.14	UGG	.0
LM18	2NP	BX440905	DV3S*627	EAPA	10-JUN-93	<	.14	UGG	.0
LM18	33DCBD	BD440905	DV3S*639	EAPA	10-JUN-93	<	6.3	UGG	.0
LM18	33DCBD	BX440905	DV3S*627	EAPA	10-JUN-93	<	6.3	UGG	.0
LM18	3NANIL	BD440905	DV3S*639	EAPA	10-JUN-93	<	.45	UGG	.0
LM18	3NANIL	BX440905	DV3S*627	EAPA	10-JUN-93	<	.45	UGG	.0
LM18	46DN2C	BD440905	DV3S*639	EAPA	10-JUN-93	<	.55	UGG	.0
LM18	46DN2C	BX440905	DV3S*627	EAPA	10-JUN-93	<	.55	UGG	.0

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Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Test		Lab		Sample		Analysis		Value Units		RPD	
Method	Code	Method Description	Test Name	Sample Number	Field Number	Lab Number	Lot	Date	Date	Date	Date				
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	4BRPPE	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4BRPPE	4BRPPE	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	4CANIL	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.81	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CANIL	4CANIL	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.81	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	4CL3C	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.095	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CL3C	4CL3C	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.095	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	4CLPPE	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4CLPPE	4CLPPE	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	4MP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.24	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4MP	4MP	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.24	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	4NANIL	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.41	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NANIL	4NANIL	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.41	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	4NP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	4NP	4NP	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	1.4	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	ABHC	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ABHC	ABHC	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	ACLDAN	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ACLDAN	ACLDAN	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	AENSLF	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	AENSLF	AENSLF	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	ALDRN	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	10-JUN-93	19-JUN-93	19-JUN-93	<	.33	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ALDRN	ALDRN	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	10-JUN-93	18-JUN-93	18-JUN-93	<	.33	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Analysis		Value		Units		RPD	
Method	Test	Field	Sample	Lab	Lot	Sample	Date	Analysis	Date	<	<
Code	Name	Number	Number	Number	Number	Date					
Method Description											
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPNE	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.036	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANAPYL	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	ANTRC	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.059	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CEXM	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.059	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CIPE	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.2	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2CLEE	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	B2EHP	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAANTR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BAPYR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.21	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBFANT	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.21	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.27	UGG	.0
BNA'S IN SOIL BY GC/MS	LM18	BBHC	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.27	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHANA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Field Sample Number							
BNA'S IN SOIL BY GC/MS	BBZP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	BBZP	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.17	UGG	.0
BNA'S IN SOIL BY GC/MS	BENSLF	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	BENSLF	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.62	UGG	.0
BNA'S IN SOIL BY GC/MS	BENZID	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.85	UGG	.0
BNA'S IN SOIL BY GC/MS	BENZID	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.85	UGG	.0
BNA'S IN SOIL BY GC/MS	BENZOZ	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	6.1	UGG	.0
BNA'S IN SOIL BY GC/MS	BENZOZ	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	6.1	UGG	.0
BNA'S IN SOIL BY GC/MS	BGHIPY	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	BGHIPY	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.25	UGG	.0
BNA'S IN SOIL BY GC/MS	BKFANT	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.066	UGG	.0
BNA'S IN SOIL BY GC/MS	BKFANT	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.066	UGG	.0
BNA'S IN SOIL BY GC/MS	BZALC	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	BZALC	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.19	UGG	.0
BNA'S IN SOIL BY GC/MS	CARBAZ	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.1	UGG	.0
BNA'S IN SOIL BY GC/MS	CARBAZ	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.1	UGG	.0
BNA'S IN SOIL BY GC/MS	CHRY	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.12	UGG	.0
BNA'S IN SOIL BY GC/MS	CHRY	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.12	UGG	.0
BNA'S IN SOIL BY GC/MS	CL6BZ	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	CL6BZ	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	.033	UGG	.0
BNA'S IN SOIL BY GC/MS	CL6CP	BD440905	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	6.2	UGG	.0
BNA'S IN SOIL BY GC/MS	CL6CP	BX440905	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	6.2	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Sample Number							
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.15	UGG
BNA'S IN SOIL BY GC/MS	LM18	CL6ET	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.15	UGG
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.21	UGG
BNA'S IN SOIL BY GC/MS	LM18	DBAHA	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.21	UGG
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.27	UGG
BNA'S IN SOIL BY GC/MS	LM18	DBHC	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.27	UGG
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.035	UGG
BNA'S IN SOIL BY GC/MS	LM18	DBZFUR	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.035	UGG
BNA'S IN SOIL BY GC/MS	LM18	DEP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.24	UGG
BNA'S IN SOIL BY GC/MS	LM18	DEP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.24	UGG
BNA'S IN SOIL BY GC/MS	LM18	DLDRN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.31	UGG
BNA'S IN SOIL BY GC/MS	LM18	DLDRN	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.31	UGG
BNA'S IN SOIL BY GC/MS	LM18	DMP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.17	UGG
BNA'S IN SOIL BY GC/MS	LM18	DMP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.17	UGG
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.061	UGG
BNA'S IN SOIL BY GC/MS	LM18	DNBP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.061	UGG
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.19	UGG
BNA'S IN SOIL BY GC/MS	LM18	DNOP	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.19	UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.45	UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRN	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.45	UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.53	UGG
BNA'S IN SOIL BY GC/MS	LM18	ENDRNA	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.53	UGG

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Test Name	Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Method Description	Method Code	Method Description										
LM18	BNA'S IN SOIL BY GC/MS	ENDRNM	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.53	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	ENDRNM	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.53	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	ESFS04	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.62	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	ESFS04	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.62	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	FANT	BD440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.068	UGG	114.5
LM18	BNA'S IN SOIL BY GC/MS	FANT	BX440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.25	UGG	114.5
LM18	BNA'S IN SOIL BY GC/MS	FLRENE	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.033	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	FLRENE	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.033	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	GCLDAN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.33	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	GCLDAN	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.33	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	HCBD	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.23	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	HCBD	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.23	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	HPCL	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.13	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	HPCL	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.13	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	HPCLE	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.33	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	HPCLE	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.33	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	ICDPYR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.29	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	ICDPYR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.29	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	ISOPHR	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.033	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	ISOPHR	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.033	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	LIN	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	<		.27	UGG	.0
LM18	BNA'S IN SOIL BY GC/MS	LIN	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	<		.27	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field			Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
			Sample Number	Field Number	Field Name								
BNAS IN SOIL BY GC/MS	LM18	MEXCLR	BD440905	BD440905	MEXCLR	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.33	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	MEXCLR	BX440905	BX440905	MEXCLR	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.33	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NAP	BD440905	BD440905	NAP	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.037	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NAP	BX440905	BX440905	NAP	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.037	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NB	BD440905	BD440905	NB	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.045	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NB	BX440905	BX440905	NB	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.045	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NNDMEA	BD440905	BD440905	NNDMEA	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.14	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NNDMEA	BX440905	BX440905	NNDMEA	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.14	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NNDNPA	BD440905	BD440905	NNDNPA	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.2	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NNDNPA	BX440905	BX440905	NNDNPA	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.2	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NNDPA	BD440905	BD440905	NNDPA	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	.19	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	NNDPA	BX440905	BX440905	NNDPA	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	.19	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB016	BD440905	BD440905	PCB016	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB016	BX440905	BX440905	PCB016	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB221	BD440905	BD440905	PCB221	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB221	BX440905	BX440905	PCB221	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB232	BD440905	BD440905	PCB232	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB232	BX440905	BX440905	PCB232	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB242	BD440905	BD440905	PCB242	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB242	BX440905	BX440905	PCB242	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	1.4	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB248	BD440905	BD440905	PCB248	DV3S*639	EAPA	10-JUN-93	19-JUN-93	<	2	UGG	.0
BNAS IN SOIL BY GC/MS	LM18	PCB248	BX440905	BX440905	PCB248	DV3S*627	EAPA	10-JUN-93	18-JUN-93	<	2	UGG	.0

SAMPLE DUPLICATES

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Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Sample		Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Lab Number	Lot	Date				
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.0054	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	112TCE	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.0054	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.0039	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.0039	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.0023	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	11DCE	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.0023	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.003	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.003	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCE	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.0029	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	12DCLP	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.0029	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.01	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	2CLEVE	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.01	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACET	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACROLN	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ACRYLO	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BDG61205	DV3S*598 EMJA	01-JUN-93	<	.0029	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	BRDCLM	BXG61205	DV3S*581 EMKA	01-JUN-93	<	.0029	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS									
Method	Test	Field	Lab	Lot	Sample	Analysis	Value	Units	RPD		
Code	Name	Number	Number		Date	Date					

VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C13DCP	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2AVE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2H3CL	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0062	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2H3CL	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0062	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2H5CL	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C2H5CL	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0015	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	C6H6	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0015	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL3F	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0059	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL3F	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0059	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.007	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CCL4	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.007	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH2CL2	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.012	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0057	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3BR	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0057	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0088	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CH3CL	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0088	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0069	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHBR3	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0069	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
	Method Code	Test Name	Sample Number	Field Number								
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.00087	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CHCL3	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.00087	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CL2BZ	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.1	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.00086	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CLC6H5	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.00086	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0044	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	CS2	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0044	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0031	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	DBRCLM	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0031	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	ETC6H5	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0017	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.00078	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEC6H5	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.00078	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.07	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MEK	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.07	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.027	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MIBK	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.027	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	MNBK	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.032	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BDG61205	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0026	UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	STYR	BXG61205	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0026	UGG	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Value Units		RPD
								<	<	
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	T13DCP	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0024 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEA	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0024 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.00081 UGG	110.2
VOC'S IN SOIL BY GC/MS	LM19	TCLEE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0028 UGG	110.2
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	TRCLE	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0028 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BDG61205	DV3S*598	EMJA	01-JUN-93	10-JUN-93	<	.0015 UGG	.0
VOC'S IN SOIL BY GC/MS	LM19	XYLEN	BXG61205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	<	.0015 UGG	.0
HG IN WATER BY CVAA	SB01	HG	MXG308X2	DV3F*557	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
HG IN WATER BY CVAA	SB01	HG	MDG308X2	DV3F*647	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
HG IN WATER BY CVAA	SB01	HG	MDG308X2	DV3M*647	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
HG IN WATER BY CVAA	SB01	HG	MXG308X2	DV3M*557	IEDA	21-SEP-93	12-OCT-93	<	.243 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MXG308X2	DV3F*557	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MDG308X2	DV3F*647	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MDG308X2	DV3M*647	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
TL IN WATER BY GFAA	SD09	TL	MXG308X2	DV3M*557	GMQA	21-SEP-93	02-NOV-93	<	6.99 UGL	.0
PB IN WATER BY GFAA	SD20	PB	MXG308X2	DV3F*557	INGA	21-SEP-93	05-NOV-93	<	1.26 UGL	.0
PB IN WATER BY GFAA	SD20	PB	MDG308X2	DV3F*647	INGA	21-SEP-93	05-NOV-93	<	1.26 UGL	.0
PB IN WATER BY GFAA	SD20	PB	MXG308X2	DV3M*557	INGA	21-SEP-93	05-NOV-93	<	4.01 UGL	55.0
PB IN WATER BY GFAA	SD20	PB	MDG308X2	DV3M*647	INGA	21-SEP-93	05-NOV-93	<	2.28 UGL	55.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

USATHANA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Field Sample Number							
SD20	PB	MDG613X1	MDG613X1	DV3W*645	EWGA	25-JUN-93	28-JUL-93	9.33	UGL	34.0
SD20	PB	MDG613X1	MDG613X1	DV3W*586	EWGA	25-JUN-93	28-JUL-93	6.62	UGL	34.0
SD21	SE	MXG308X2	MXG308X2	DV3F*557	HNMA	21-SEP-93	04-NOV-93	3.02	UGL	.0
SD21	SE	MXG308X2	MXG308X2	DV3F*647	HNMA	21-SEP-93	04-NOV-93	3.02	UGL	.0
SD21	SE	MXG308X2	MXG308X2	DV3W*647	HNMA	21-SEP-93	04-NOV-93	3.02	UGL	.0
SD21	SE	MXG308X2	MXG308X2	DV3W*557	HNMA	21-SEP-93	04-NOV-93	3.02	UGL	.0
SD22	AS	MXG308X2	MXG308X2	DV3F*557	HOKA	21-SEP-93	05-NOV-93	2.54	UGL	.0
SD22	AS	MXG308X2	MXG308X2	DV3F*647	HOKA	21-SEP-93	05-NOV-93	2.54	UGL	.0
SD22	AS	MXG308X2	MXG308X2	DV3W*647	HOKA	21-SEP-93	05-NOV-93	2.54	UGL	.0
SD22	AS	MXG308X2	MXG308X2	DV3W*557	HOKA	21-SEP-93	05-NOV-93	2.54	UGL	.0
SD28	SB	MXG308X2	MXG308X2	DV3F*557	FRTA	21-SEP-93	05-NOV-93	3.03	UGL	.0
SD28	SB	MXG308X2	MXG308X2	DV3F*647	FRTA	21-SEP-93	04-NOV-93	3.03	UGL	.0
SD28	SB	MXG308X2	MXG308X2	DV3W*647	FRTA	21-SEP-93	05-NOV-93	3.03	UGL	.0
SD28	SB	MXG308X2	MXG308X2	DV3W*557	FRTA	21-SEP-93	05-NOV-93	3.03	UGL	.0
SS10	AG	MXG308X2	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	4.6	UGL	.0
SS10	AG	MXG308X2	MXG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	4.6	UGL	.0
SS10	AG	MXG308X2	MXG308X2	DV3W*647	HX1A	21-SEP-93	15-OCT-93	4.6	UGL	.0
SS10	AG	MXG308X2	MXG308X2	DV3W*557	HX1A	21-SEP-93	15-OCT-93	4.6	UGL	.0
SS10	AL	MXG308X2	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	141	UGL	.0
SS10	AL	MXG308X2	MXG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	141	UGL	.0
SS10	AL	MXG308X2	MXG308X2	DV3W*557	HX1A	21-SEP-93	15-OCT-93	253	UGL	56.9
SS10	AL	MXG308X2	MXG308X2	DV3W*647	HX1A	21-SEP-93	15-OCT-93	141	UGL	56.9
SS10	BA	MDG308X2	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	6.81	UGL	6.7

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHANA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Field Sample Number								
SS10	BA	MDG308X2	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93		6.37	UGL	6.7
SS10	BA	MDG308X2	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93		8.26	UGL	16.9
SS10	BA	MDG308X2	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93		6.97	UGL	16.9
SS10	BE	MDG308X2	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	5	UGL	.0
SS10	BE	MDG308X2	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	5	UGL	.0
SS10	BE	MDG308X2	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	5	UGL	.0
SS10	BE	MDG308X2	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	5	UGL	.0
SS10	CA	MDG308X2	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93		2650	UGL	5.4
SS10	CA	MDG308X2	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93		2510	UGL	5.4
SS10	CA	MDG308X2	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93		2440	UGL	.4
SS10	CA	MDG308X2	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93		2430	UGL	.4
SS10	CA	MDG613X1	MDG613X1	DV3M*645	EVHA	25-JUN-93	20-JUL-93		15900	UGL	3.2
SS10	CA	MDG613X1	MDG613X1	DV3M*586	EVHA	25-JUN-93	20-JUL-93		15400	UGL	3.2
SS10	CD	MDG308X2	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	4.01	UGL	.0
SS10	CD	MDG308X2	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	4.01	UGL	.0
SS10	CD	MDG308X2	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	4.01	UGL	.0
SS10	CD	MDG308X2	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	4.01	UGL	.0
SS10	CO	MDG308X2	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	25	UGL	.0
SS10	CO	MDG308X2	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	25	UGL	.0
SS10	CO	MDG308X2	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	25	UGL	.0
SS10	CO	MDG308X2	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	25	UGL	.0
SS10	CR	MDG308X2	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	6.02	UGL	.0
SS10	CR	MDG308X2	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	6.02	UGL	.0
SS10	CR	MDG308X2	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	6.02	UGL	.0
SS10	CR	MDG308X2	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	6.02	UGL	.0
SS10	CJ	MDG308X2	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	8.09	UGL	.0
SS10	CJ	MDG308X2	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	8.09	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Analysis		Value		Units		RPD	
Method	Test	Field	Sample	Lab	Lot	Sample	Date	Analysis	Date	Value	Units
Code	Name	Number	Number	Number	Number	Date					
SS10	CU	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	8.09	UGL	50.8	
SS10	CU	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	13.6	UGL	50.8	
SS10	FE	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	38.8	UGL	.0	
SS10	FE	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	38.8	UGL	.0	
SS10	FE	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	334	UGL	86.7	
SS10	FE	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	132	UGL	86.7	
SS10	K	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	1050	UGL	39.2	
SS10	K	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	706	UGL	39.2	
SS10	K	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	1240	UGL	29.7	
SS10	K	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	919	UGL	29.7	
SS10	K	MDG613X1	DV3M*586	EVHA	25-JUN-93	20-JUL-93	<	4540	UGL	.0	
SS10	K	MDG613X1	DV3M*645	EVHA	25-JUN-93	20-JUL-93	<	4540	UGL	.0	
SS10	MG	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	500	UGL	.0	
SS10	MG	MDG613X1	DV3M*586	EVHA	25-JUN-93	20-JUL-93	<	3720	UGL	4.7	
SS10	MG	MDG613X1	DV3M*645	EVHA	25-JUN-93	20-JUL-93	<	3550	UGL	4.7	
SS10	MN	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	74.1	UGL	8.7	
SS10	MN	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	67.9	UGL	8.7	
SS10	MN	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	53.4	UGL	13.2	
SS10	MN	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	46.8	UGL	13.2	
SS10	NA	MDG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	<	4790	UGL	7.8	
SS10	NA	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	4430	UGL	7.8	
SS10	NA	MDG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	<	3000	UGL	17.8	
SS10	NA	MDG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	<	2510	UGL	17.8	
SS10	NI	MDG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	<	34.3	UGL	.0	

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHANA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Test Name							
Method Description										
METALS IN WATER BY ICAP	SS10	NI	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	34.3	UGL	.0
METALS IN WATER BY ICAP	SS10	NI	MXG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	34.3	UGL	.0
METALS IN WATER BY ICAP	SS10	NI	MXG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	34.3	UGL	.0
METALS IN WATER BY ICAP	SS10	V	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	11	UGL	.0
METALS IN WATER BY ICAP	SS10	V	MXG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	11	UGL	.0
METALS IN WATER BY ICAP	SS10	V	MXG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	11	UGL	.0
METALS IN WATER BY ICAP	SS10	V	MXG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	11	UGL	.0
METALS IN WATER BY ICAP	SS10	ZN	MXG308X2	DV3F*647	HX1A	21-SEP-93	15-OCT-93	21.1	UGL	.0
METALS IN WATER BY ICAP	SS10	ZN	MXG308X2	DV3F*557	HX1A	21-SEP-93	15-OCT-93	21.1	UGL	.0
METALS IN WATER BY ICAP	SS10	ZN	MXG308X2	DV3M*647	HX1A	21-SEP-93	15-OCT-93	21.1	UGL	.0
METALS IN WATER BY ICAP	SS10	ZN	MXG308X2	DV3M*557	HX1A	21-SEP-93	15-OCT-93	21.1	UGL	.0
NO2, NO3 IN WATER	TF22	NIT	MXG308X2	DV3M*647	EQRA	21-SEP-93	04-OCT-93	1300	UGL	16.7
NO2, NO3 IN WATER	TF22	NIT	MXG308X2	DV3M*557	EQRA	21-SEP-93	04-OCT-93	1100	UGL	16.7
NO2, NO3 IN WATER	TF22	NIT	MXG613X1	DV3M*645	EQDA	25-JUN-93	14-JUL-93	390	UGL	10.8
NO2, NO3 IN WATER	TF22	NIT	MXG613X1	DV3M*586	EQDA	25-JUN-93	14-JUL-93	350	UGL	10.8
SO4 IN WATER	TT10	CL	MXG308X2	DV3M*557	IOAA	21-SEP-93	28-SEP-93	2470	UGL	15.3
SO4 IN WATER	TT10	CL	MXG308X2	DV3M*647	IOAA	21-SEP-93	28-SEP-93	2120	UGL	15.3
SO4 IN WATER	TT10	CL	MXG613X1	DV3M*645	DEQA	25-JUN-93	14-JUL-93	29700	UGL	1.4
SO4 IN WATER	TT10	CL	MXG613X1	DV3M*586	DEQA	25-JUN-93	14-JUL-93	29300	UGL	1.4
SO4 IN WATER	TT10	SO4	MXG308X2	DV3M*557	IOAA	21-SEP-93	28-SEP-93	10000	UGL	.0
SO4 IN WATER	TT10	SO4	MXG308X2	DV3M*647	IOAA	21-SEP-93	28-SEP-93	10000	UGL	.0
SO4 IN WATER	TT10	SO4	MXG613X1	DV3M*586	DEQA	25-JUN-93	14-JUL-93	12700	UGL	1.6
SO4 IN WATER	TT10	SO4	MXG613X1	DV3M*645	DEQA	25-JUN-93	14-JUL-93	12500	UGL	1.6
BNA'S IN WATER BY GC/MS	UM18	124TCB	MXG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	1.8	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS			Sample Date	Analysis Date	<	Value	Units	RPD
			Field Number	Lab Number	Lot						
BNA'S IN WATER BY GC/MS	UM18	124TCB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DCLB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	12DPH	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	13DCLB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	14DCLB	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	245TCP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	246TCP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DCLP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2.9	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DMPN	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	21	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	24DNT	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	26DNT	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.79	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Lab	Lot	Sample	Analysis			RPD
Code	Name	Number	Number	Date	Date	Date	Value	Units	
Method Description									
BNA'S IN WATER BY GC/MS	UM18	26DNT	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.79 UGL
BNA'S IN WATER BY GC/MS	UM18	2CLP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.99 UGL
BNA'S IN WATER BY GC/MS	UM18	2CLP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.99 UGL
BNA'S IN WATER BY GC/MS	UM18	2CNAP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	UM18	2CNAP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	UM18	2MNAIP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	1.7 UGL
BNA'S IN WATER BY GC/MS	UM18	2MNAIP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	1.7 UGL
BNA'S IN WATER BY GC/MS	UM18	2MP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	3.9 UGL
BNA'S IN WATER BY GC/MS	UM18	2MP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	3.9 UGL
BNA'S IN WATER BY GC/MS	UM18	2NANIL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.3 UGL
BNA'S IN WATER BY GC/MS	UM18	2NANIL	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.3 UGL
BNA'S IN WATER BY GC/MS	UM18	2NP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	3.7 UGL
BNA'S IN WATER BY GC/MS	UM18	2NP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	3.7 UGL
BNA'S IN WATER BY GC/MS	UM18	33DCBD	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	12 UGL
BNA'S IN WATER BY GC/MS	UM18	33DCBD	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	12 UGL
BNA'S IN WATER BY GC/MS	UM18	3NANIL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.9 UGL
BNA'S IN WATER BY GC/MS	UM18	3NANIL	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.9 UGL
BNA'S IN WATER BY GC/MS	UM18	46DN2C	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	17 UGL
BNA'S IN WATER BY GC/MS	UM18	46DN2C	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	17 UGL
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.2 UGL
BNA'S IN WATER BY GC/MS	UM18	4BRPPE	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.2 UGL
BNA'S IN WATER BY GC/MS	UM18	4CANIL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	7.3 UGL

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Method Description	Test Name	Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code		Sample Number	Field Sample Number											
UM18	4CANIL	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	7.3	UGL	.0				
UM18	4CL3C	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0				
UM18	4CL3C	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0				
UM18	4CLPPE	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL	.0				
UM18	4CLPPE	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL	.0				
UM18	4NP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.52	UGL	.0				
UM18	4NP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.52	UGL	.0				
UM18	4NANIL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL	.0				
UM18	4NANIL	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	5.2	UGL	.0				
UM18	4NP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	12	UGL	.0				
UM18	4NP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	12	UGL	.0				
UM18	ABHC	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0				
UM18	ABHC	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0				
UM18	ACLDAN	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL	.0				
UM18	ACLDAN	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL	.0				
UM18	AENSLF	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0				
UM18	AENSLF	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0				
UM18	ALDRN	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL	.0				
UM18	ALDRN	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL	.0				
UM18	ANAPNE	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0				
UM18	ANAPNE	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	1.7	UGL	.0				
UM18	ANAPYL	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL	.0				

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method	Test	Field	Sample	Lab	Lot	Sample	Analysis		
Code	Name	Number	Number	Number		Date	Date		
Method Description								Value	Units
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
BNA'S IN WATER BY GC/MS	ANAPYL	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	ANTRC	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	ANTRC	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	B2CEXM	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.5 UGL
BNA'S IN WATER BY GC/MS	B2CEXM	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.5 UGL
BNA'S IN WATER BY GC/MS	B2CIPE	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.3 UGL
BNA'S IN WATER BY GC/MS	B2CIPE	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.3 UGL
BNA'S IN WATER BY GC/MS	B2CLEE	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.9 UGL
BNA'S IN WATER BY GC/MS	B2CLEE	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.9 UGL
BNA'S IN WATER BY GC/MS	B2EHP	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.8 UGL
BNA'S IN WATER BY GC/MS	B2EHP	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.8 UGL
BNA'S IN WATER BY GC/MS	BAANTR	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.6 UGL
BNA'S IN WATER BY GC/MS	BAANTR	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.6 UGL
BNA'S IN WATER BY GC/MS	BAPYR	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.7 UGL
BNA'S IN WATER BY GC/MS	BAPYR	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.7 UGL
BNA'S IN WATER BY GC/MS	BBFANT	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.4 UGL
BNA'S IN WATER BY GC/MS	BBFANT	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.4 UGL
BNA'S IN WATER BY GC/MS	BBHC	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4 UGL
BNA'S IN WATER BY GC/MS	BBHC	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4 UGL
BNA'S IN WATER BY GC/MS	BBZP	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	3.4 UGL
BNA'S IN WATER BY GC/MS	BBZP	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	3.4 UGL
BNA'S IN WATER BY GC/MS	BENSLF	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	9.2 UGL

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Sample Number								
BNA'S IN WATER BY GC/MS	BENSLF	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	BENZID	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	10	UGL	.0
BNA'S IN WATER BY GC/MS	BENZID	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	10	UGL	.0
BNA'S IN WATER BY GC/MS	BENZOZ	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	13	UGL	.0
BNA'S IN WATER BY GC/MS	BENZOZ	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	13	UGL	.0
BNA'S IN WATER BY GC/MS	BGHIPY	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	6.1	UGL	.0
BNA'S IN WATER BY GC/MS	BGHIPY	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	6.1	UGL	.0
BNA'S IN WATER BY GC/MS	BKFANT	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.87	UGL	.0
BNA'S IN WATER BY GC/MS	BKFANT	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	.87	UGL	.0
BNA'S IN WATER BY GC/MS	BZALC	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.72	UGL	.0
BNA'S IN WATER BY GC/MS	BZALC	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	.72	UGL	.0
BNA'S IN WATER BY GC/MS	CARBAZ	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	CARBAZ	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	CHRY	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2.4	UGL	.0
BNA'S IN WATER BY GC/MS	CHRY	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2.4	UGL	.0
BNA'S IN WATER BY GC/MS	CL6BZ	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.6	UGL	.0
BNA'S IN WATER BY GC/MS	CL6BZ	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.6	UGL	.0
BNA'S IN WATER BY GC/MS	CL6CP	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	8.6	UGL	.0
BNA'S IN WATER BY GC/MS	CL6CP	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	8.6	UGL	.0
BNA'S IN WATER BY GC/MS	CL6ET	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	CL6ET	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	1.5	UGL	.0
BNA'S IN WATER BY GC/MS	DBAHA	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	6.5	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6
SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Description	Method Code	Test Name	Field Sample Number							
BNA'S IN WATER BY GC/MS	UM18	DBAHA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	6.5 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBHC	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	1.7 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DBZFUR	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	1.7 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	2 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DEP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	2 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.7 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DLDRN	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.7 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	1.5 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DMP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	1.5 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	3.7 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNBP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	3.7 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	15 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	DNOP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	15 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	7.6 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRN	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	7.6 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	8 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	8 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	8 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ENDRNK	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	8 UGL	.0
BNA'S IN WATER BY GC/MS	UM18	ESFS04	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	9.2 UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Code	Test Name	Field Sample Number	Field Sample Number							
UM18	ESFS04	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL
UM18	FANT	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	3.3	UGL
UM18	FANT	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	3.3	UGL
UM18	FLENE	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	3.7	UGL
UM18	FLENE	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	3.7	UGL
UM18	GCLDAN	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
UM18	GCLDAN	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
UM18	HCBD	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	3.4	UGL
UM18	HCBD	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	3.4	UGL
UM18	HPCL	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2	UGL
UM18	HPCL	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2	UGL
UM18	HPCLE	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5	UGL
UM18	HPCLE	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5	UGL
UM18	ICDPYR	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	8.6	UGL
UM18	ICDPYR	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	8.6	UGL
UM18	ISOPHR	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.8	UGL
UM18	ISOPHR	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.8	UGL
UM18	LIN	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
UM18	LIN	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL
UM18	MEXCLR	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
UM18	MEXCLR	MDG613X1	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	5.1	UGL
UM18	NAP	MXG613X1	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS							
Method Description	Method Code	Test Name	Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Value	Units
BNA'S IN WATER BY GC/MS	UM18	NAP	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	UM18	NB	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	UM18	NB	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	.5 UGL
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	2 UGL
BNA'S IN WATER BY GC/MS	UM18	NNDMEA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	2 UGL
BNA'S IN WATER BY GC/MS	UM18	NNDMPA	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	4.4 UGL
BNA'S IN WATER BY GC/MS	UM18	NNDMPA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	4.4 UGL
BNA'S IN WATER BY GC/MS	UM18	NNDPA	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	3 UGL
BNA'S IN WATER BY GC/MS	UM18	NNDPA	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	3 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB016	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	21 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB016	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	21 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB221	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	21 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB221	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	21 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB232	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	21 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB232	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	21 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB242	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	30 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB242	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	30 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB248	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	30 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB248	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	30 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB254	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	36 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB254	MDG613X1	DV3M*645	ETNA	25-JUN-93	14-JUL-93	<	36 UGL
BNA'S IN WATER BY GC/MS	UM18	PCB260	MXG613X1	DV3M*586	ETNA	25-JUN-93	14-JUL-93	<	36 UGL

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
BNA'S IN WATER BY GC/MS	UM18	PCB260	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	36	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	18	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PCP	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	18	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHANTR	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	.5	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PHENOL	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDD	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDD	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDE	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDE	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	4.7	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDT	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PPDDT	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	9.2	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PYR	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	2.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	PYR	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	2.8	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	TXPHEN	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	<	36	UGL	.0
BNA'S IN WATER BY GC/MS	UM18	TXPHEN	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	<	36	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	111TCE	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	111TCE	MDG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	112TCE	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	1.2	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	112TCE	MDG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	1.2	UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

USATHANA		IRDMIS		Lab Number	Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Description	Method Code	Test Name	Field Sample Number							
VOC'S IN WATER BY GC/MS	UM20	11DCE	MXG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	11DCE	MDG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	11DCE	MXG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.68 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	11DCE	MDG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.68 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	12DCE	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	12DCE	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	12DCE	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	12DCE	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	12DCLP	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	12DCLP	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	2CLEVE	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.71 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	2CLEVE	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.71 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACET	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	13 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACET	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	13 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACROLN	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	100 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACROLN	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	100 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACRYLO	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	100 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	ACRYLO	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	100 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	BRDCLM	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.59 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	BRDCLM	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.59 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C13DCP	MXG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	<	.58 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C13DCP	MDG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	<	.58 UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS		Lot	Sample Date	Analysis Date	Value	Units	RPD
Method Description	Method Code	Test Name	Field Sample Number						
VOC'S IN WATER BY GC/MS	UM20	C2AVE	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	8.3 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2AVE	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	8.3 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H3CL	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	2.6 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H3CL	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	2.6 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H5CL	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	1.9 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C2H5CL	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	1.9 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C6H6	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	C6H6	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL3F	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	1.4 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL3F	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	1.4 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL4	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	.58 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CCL4	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	.58 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH2CL2	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	2.3 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH2CL2	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	2.3 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3BR	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	5.8 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3BR	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	5.8 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3CL	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	3.2 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CH3CL	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	3.2 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CHBR3	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	2.6 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CHBR3	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	2.6 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CHCL3	MDG613X1	DV3M*645	FGGA	25-JUN-93	<	.5 UGL	.0
VOC'S IN WATER BY GC/MS	UM20	CHCL3	HXG613X1	DV3M*586	FGGA	25-JUN-93	<	.5 UGL	.0

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

SAMPLE DUPLICATES

USATHAMA		IRDMIS									
Method	Test	Field	Lab	Lot	Sample	Analysis		Value	Units	RPD	
Code	Name	Sample	Number		Date	Date	<				
Method Description		Number									
VOC'S IN WATER BY GC/MS	CL2BZ	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	10	UGL	.0	
VOC'S IN WATER BY GC/MS	CL2BZ	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	10	UGL	.0	
VOC'S IN WATER BY GC/MS	CLC6H5	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	CLC6H5	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	CS2	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	CS2	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	DBRCLM	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.67	UGL	.0	
VOC'S IN WATER BY GC/MS	DBRCLM	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.67	UGL	.0	
VOC'S IN WATER BY GC/MS	ETC6H5	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	ETC6H5	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	MEC6H5	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	MEC6H5	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	MEK	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	6.4	UGL	.0	
VOC'S IN WATER BY GC/MS	MEK	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	6.4	UGL	.0	
VOC'S IN WATER BY GC/MS	MIBK	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	3	UGL	.0	
VOC'S IN WATER BY GC/MS	MIBK	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	3	UGL	.0	
VOC'S IN WATER BY GC/MS	MNBK	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	3.6	UGL	.0	
VOC'S IN WATER BY GC/MS	MNBK	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	3.6	UGL	.0	
VOC'S IN WATER BY GC/MS	STYR	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	STYR	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0	
VOC'S IN WATER BY GC/MS	T130CP	MXG613X1	DV3W*645	FGGA	25-JUN-93	30-JUN-93	<	.7	UGL	.0	
VOC'S IN WATER BY GC/MS	T130CP	MXG613X1	DV3W*586	FGGA	25-JUN-93	28-JUN-93	<	.7	UGL	.0	

Table FS-10
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SAMPLE DUPLICATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	<	Value	Units	RPD
VOC'S IN WATER BY GC/MS	UM20	TCLEA	MDG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<	.51	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEA	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<	.51	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEE	MDG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<	1.6	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TCLEE	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<	1.6	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TRCLE	MDG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<	.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	TRCLE	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<	.5	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	XYLEN	MDG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	<	.84	UGL	.0
VOC'S IN WATER BY GC/MS	UM20	XYLEN	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	<	.84	UGL	.0

SQL> SPOOL OFF

SVOC SURROGATES

USATHAMA Method Code	Test Name	IRDMIS Field Sample Number		Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
LM18	246TBP	BX440715	DV3S*620	EAPA	10-JUN-93	18-JUN-93	6.7	6.4	UGG	95.5	
	246TBP	BX440721	DV3S*621	EAPA	10-JUN-93	18-JUN-93	6.7	4.2	UGG	62.7	
	246TBP	BX440724	DV3S*622	EAPA	10-JUN-93	18-JUN-93	6.7	6.3	UGG	94.0	
	246TBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	7.7	UGG	114.9	
	246TBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	7.7	UGG	114.9	
	246TBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	7.7	UGG	114.9	
	246TBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	7.7	UGG	114.9	
	246TBP	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	6.7	5.7	UGG	85.1	
	246TBP	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	6.7	5.7	UGG	85.1	
	246TBP	BX440810	DV3S*625	EAPA	11-JUN-93	18-JUN-93	6.7	5.9	UGG	88.1	
	246TBP	BX440815	DV3S*625	EAPA	11-JUN-93	18-JUN-93	6.7	6.3	UGG	94.0	
	246TBP	BX440825	DV3S*626	EAPA	11-JUN-93	18-JUN-93	6.7	6.6	UGG	98.5	
	246TBP	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	6.7	5.9	UGG	88.1	
	246TBP	BX440910	DV3S*628	EAPA	10-JUN-93	18-JUN-93	6.7	6.3	UGG	94.0	
	246TBP	BX440915	DV3S*629	EAPA	10-JUN-93	18-JUN-93	6.7	6	UGG	89.6	
	246TBP	BX440925	DV3S*630	EAPA	10-JUN-93	18-JUN-93	6.7	6.3	UGG	94.0	
	246TBP	BX441010	DV3S*631	EAPA	10-JUN-93	18-JUN-93	6.7	6.2	UGG	92.5	
	246TBP	BX441015	DV3S*633	EAPA	10-JUN-93	19-JUN-93	6.7	5.8	UGG	86.6	
LM18	246TBP	BX441025	DV3S*634	EAPA	10-JUN-93	19-JUN-93	6.7	6	UGG	89.6	
	246TBP	SX440200	DV3S*637	EATA	15-JUN-93	25-JUN-93	6.7	5.6	UGG	83.6	
	246TBP	SX440300	DV3S*638	EATA	15-JUN-93	25-JUN-93	6.7	38	UGG	5.7	
	246TBP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	6.7	7.7	UGG	114.9	

	avg										
	minimum										
	maximum										
LM18	2FBP	BX440715	DV3S*620	EAPA	10-JUN-93	18-JUN-93	3.3	3.2	UGG	97.0	
	2FBP	BX440721	DV3S*621	EAPA	10-JUN-93	18-JUN-93	3.3	2.4	UGG	72.7	
	2FBP	BX440724	DV3S*622	EAPA	10-JUN-93	18-JUN-93	3.3	3.1	UGG	93.9	
	2FBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.1	UGG	93.9	
	2FBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.1	UGG	93.9	
	2FBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.1	UGG	93.9	
	2FBP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.1	UGG	93.9	
	2FBP	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	3.3	2.9	UGG	87.9	
LM18	2FBP	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	3.3	2.9	UGG	87.9	

Table FS-11
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SVOC SURROGATES

USATHAMA Method Code	Method Description	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX440810	DV3S*624	EAPA	11-JUN-93	18-JUN-93	3.3	2.7 UGG	81.8
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX440815	DV3S*625	EAPA	11-JUN-93	18-JUN-93	3.3	3 UGG	90.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX440825	DV3S*626	EAPA	11-JUN-93	18-JUN-93	3.3	3.2 UGG	97.0
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	3.3	2.8 UGG	84.8
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX440910	DV3S*628	EAPA	10-JUN-93	18-JUN-93	3.3	3.2 UGG	97.0
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX440915	DV3S*629	EAPA	10-JUN-93	18-JUN-93	3.3	3.1 UGG	93.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX440925	DV3S*630	EAPA	10-JUN-93	18-JUN-93	3.3	3.1 UGG	93.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX441005	DV3S*631	EAPA	10-JUN-93	18-JUN-93	3.3	3 UGG	90.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX441010	DV3S*632	EAPA	10-JUN-93	18-JUN-93	3.3	2.9 UGG	87.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX441015	DV3S*633	EAPA	10-JUN-93	19-JUN-93	3.3	2.9 UGG	87.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BX441025	DV3S*634	EAPA	10-JUN-93	19-JUN-93	3.3	3.1 UGG	93.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	SX440200	DV3S*637	EATA	15-JUN-93	25-JUN-93	3.3	3 UGG	90.9
LM18	BNA'S IN SOIL BY GC/MS	2FBP	SX440300	DV3S*638	EATA	15-JUN-93	25-JUN-93	3.3	.021 UGG	.6
LM18	BNA'S IN SOIL BY GC/MS	2FBP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	3.3	3.2 UGG	97.0

avg										
minimum										
maximum										
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440715	DV3S*620	EAPA	10-JUN-93	18-JUN-93	6.7	9.5 UGG	141.8
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440721	DV3S*621	EAPA	10-JUN-93	18-JUN-93	6.7	3.8 UGG	56.7
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440724	DV3S*622	EAPA	10-JUN-93	18-JUN-93	6.7	7.9 UGG	117.9
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	8.6 UGG	128.4
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	8.6 UGG	128.4
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	8.3 UGG	123.9
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	7.9 UGG	117.9
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	6.7	7.9 UGG	117.9
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440810	DV3S*624	EAPA	11-JUN-93	18-JUN-93	6.7	7.7 UGG	114.9
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440815	DV3S*625	EAPA	11-JUN-93	18-JUN-93	6.7	8.1 UGG	120.9
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440825	DV3S*626	EAPA	11-JUN-93	18-JUN-93	6.7	8.9 UGG	132.8
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	6.7	7.7 UGG	114.9
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440910	DV3S*628	EAPA	10-JUN-93	18-JUN-93	6.7	9.1 UGG	135.8
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440915	DV3S*629	EAPA	10-JUN-93	18-JUN-93	6.7	8.9 UGG	132.8
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX440925	DV3S*630	EAPA	10-JUN-93	18-JUN-93	6.7	8.6 UGG	128.4
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX441005	DV3S*631	EAPA	10-JUN-93	18-JUN-93	6.7	8.9 UGG	132.8
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX441010	DV3S*632	EAPA	10-JUN-93	18-JUN-93	6.7	8.7 UGG	129.9

SVOC SURROGATES

USATHAMA		IRDMIS	Percent Recovery									
Method	Field	Test	Sample	Lab	Lot	Sample	Analysis	Spike	Value	Units	Recovery	
Code		Name	Number	Number		Date	Date	Value				
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX441015	DV3S*633	EAPA	10-JUN-93	19-JUN-93	6.7	7.7	UGG	114.9	
LM18	BNA'S IN SOIL BY GC/MS	2FP	BX441025	DV3S*634	EAPA	10-JUN-93	19-JUN-93	6.7	9	UGG	134.3	
LM18	BNA'S IN SOIL BY GC/MS	2FP	SK440200	DV3S*637	EATA	15-JUN-93	25-JUN-93	6.7	5	UGG	74.6	
LM18	BNA'S IN SOIL BY GC/MS	2FP	SK440300	DV3S*638	EATA	15-JUN-93	25-JUN-93	6.7	.17	UGG	2.5	
LM18	BNA'S IN SOIL BY GC/MS	2FP	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	6.7	9.3	UGG	138.8	

avg											115.9	
minimum											2.5	
maximum											141.8	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440715	DV3S*620	EAPA	10-JUN-93	18-JUN-93	3.3	3.4	UGG	103.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440721	DV3S*621	EAPA	10-JUN-93	18-JUN-93	3.3	1.2	UGG	36.4	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440724	DV3S*622	EAPA	10-JUN-93	18-JUN-93	3.3	2.9	UGG	87.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.5	UGG	106.1	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.5	UGG	106.1	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.4	UGG	103.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	3.4	UGG	103.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	3.3	2.9	UGG	87.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	3.3	2.9	UGG	87.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440810	DV3S*624	EAPA	11-JUN-93	18-JUN-93	3.3	2.8	UGG	84.8	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440815	DV3S*625	EAPA	11-JUN-93	18-JUN-93	3.3	2.9	UGG	87.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440825	DV3S*626	EAPA	11-JUN-93	18-JUN-93	3.3	3.4	UGG	103.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	3.3	2.8	UGG	84.8	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440910	DV3S*628	EAPA	10-JUN-93	18-JUN-93	3.3	3.3	UGG	100.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440915	DV3S*629	EAPA	10-JUN-93	18-JUN-93	3.3	3	UGG	90.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX440925	DV3S*630	EAPA	10-JUN-93	18-JUN-93	3.3	3.3	UGG	100.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX441005	DV3S*631	EAPA	10-JUN-93	18-JUN-93	3.3	3.4	UGG	103.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX441010	DV3S*632	EAPA	10-JUN-93	18-JUN-93	3.3	3.1	UGG	93.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX441015	DV3S*633	EAPA	10-JUN-93	19-JUN-93	3.3	2.9	UGG	87.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BX441025	DV3S*634	EAPA	10-JUN-93	19-JUN-93	3.3	3.3	UGG	100.0	
LM18	BNA'S IN SOIL BY GC/MS	NB05	SK440200	DV3S*637	EATA	15-JUN-93	25-JUN-93	3.3	3.1	UGG	93.9	
LM18	BNA'S IN SOIL BY GC/MS	NB05	SK440300	DV3S*638	EATA	15-JUN-93	25-JUN-93	3.3	.025	UGG	.8	
LM18	BNA'S IN SOIL BY GC/MS	NB05	BD440905	DV3S*639	EAPA	10-JUN-93	19-JUN-93	3.3	3.4	UGG	103.0	

avg											89.4	
minimum											.8	
maximum											106.1	

Table FS-11
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SVOC SURROGATES

USATHAMA		IRDMIS										
Method	Test	Field	Lab	Lot	Sample	Analysis	Spike	Value	Units	Percent		
Code	Name	Number	Number		Date	Date	Value			Recovery		
LM18	PHEND6	BX440715	DV3S*620	EAPA	10-JUN-93	18-JUN-93	6.7	7.9	UGG	117.9		
	PHEND6	BX440721	DV3S*621	EAPA	10-JUN-93	18-JUN-93	6.7	2.5	UGG	37.3		
	PHEND6	BX440724	DV3S*622	EAPA	10-JUN-93	18-JUN-93	6.7	6.9	UGG	103.0		
	PHEND6	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	8	UGG	119.4		
	PHEND6	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	8	UGG	119.4		
	PHEND6	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	7.9	UGG	117.9		
	PHEND6	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	6.7	7.9	UGG	117.9		
	PHEND6	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	6.7	6.8	UGG	101.5		
	PHEND6	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	6.7	6.8	UGG	101.5		
	PHEND6	BX440810	DV3S*624	EAPA	11-JUN-93	18-JUN-93	6.7	6.4	UGG	95.5		
	PHEND6	BX440815	DV3S*625	EAPA	11-JUN-93	18-JUN-93	6.7	6.9	UGG	103.0		
	PHEND6	BX440825	DV3S*626	EAPA	11-JUN-93	18-JUN-93	6.7	7.8	UGG	116.4		
	PHEND6	BX440905	DV3S*627	EAPA	10-JUN-93	18-JUN-93	6.7	6.6	UGG	98.5		
	PHEND6	BX440910	DV3S*628	EAPA	10-JUN-93	18-JUN-93	6.7	7.6	UGG	113.4		
	PHEND6	BX440915	DV3S*629	EAPA	10-JUN-93	18-JUN-93	6.7	7.5	UGG	111.9		
	PHEND6	BX440925	DV3S*630	EAPA	10-JUN-93	18-JUN-93	6.7	7.5	UGG	111.9		
	PHEND6	BX441010	DV3S*631	EAPA	10-JUN-93	18-JUN-93	6.7	7.8	UGG	116.4		
	PHEND6	BX441015	DV3S*632	EAPA	10-JUN-93	19-JUN-93	6.7	7.5	UGG	111.9		
LM18	PHEND6	BX441025	DV3S*634	EAPA	10-JUN-93	19-JUN-93	6.7	6.7	UGG	100.0		
	PHEND6	SX440200	DV3S*637	EATA	15-JUN-93	25-JUN-93	6.7	7.8	UGG	116.4		
	PHEND6	SX440300	DV3S*638	EATA	15-JUN-93	25-JUN-93	6.7	3.8	UGG	56.7		
	PHEND6	*****	DV3S*639	EAPA	10-JUN-93	19-JUN-93	6.7	23	UGG	3.4		
	avg						6.7	7.6	UGG	113.4		
	minimum									100.2		
maximum									3.4			
LM18	TRPD14	BX440715	DV3S*620	EAPA	10-JUN-93	18-JUN-93	3.3	2.5	UGG	75.8		
	TRPD14	BX440721	DV3S*621	EAPA	10-JUN-93	18-JUN-93	3.3	2.2	UGG	66.7		
	TRPD14	BX440724	DV3S*622	EAPA	10-JUN-93	18-JUN-93	3.3	2.1	UGG	63.6		
	TRPD14	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	2.6	UGG	78.8		
	TRPD14	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	2.6	UGG	78.8		
	TRPD14	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	2.4	UGG	72.7		
LM18	TRPD14	BX440805	DV3S*623	EAPA	11-JUN-93	19-JUN-93	3.3	2.4	UGG	72.7		
	TRPD14	BX440805	DV3S*623	EAPA	11-JUN-93	18-JUN-93	3.3	2.1	UGG	63.6		

SVOC SURROGATES

[illegible]

Table FS-11
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6

SVOC SURROGATES

Method Description	USATHAMA Method Code	Test Name	FROMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery
		avg minimum maximum								
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG612X1	DV34#584	ETKA	24-JUN-93	07-JUL-93	50	33 UGL	66.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG612X2	DV34#585	IFGA	24-SEP-93	12-OCT-93	50	53 UGL	106.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG613X1	DV34#586	ETNA	25-JUN-93	14-JUL-93	50	31 UGL	62.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG613X2	DV34#587	IFDA	20-SEP-93	19-OCT-93	50	47 UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG614X1	DV34#588	ETNA	25-JUN-93	14-JUL-93	50	38 UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG614X2	DV34#589	IFGA	24-SEP-93	12-OCT-93	50	46 UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG310X1	DV34#635	ETKA	24-JUN-93	07-JUL-93	50	41 UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG311X1	DV34#636	ETKA	24-JUN-93	07-JUL-93	50	41 UGL	82.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK93123	DV34#641	ETKA	24-JUN-93	07-JUL-93	50	40 UGL	80.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK93123	DV34#641	ETKA	24-JUN-93	07-JUL-93	50	51 UGL	102.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG310X2	DV34#642	IFEA	22-SEP-93	15-OCT-93	50	52 UGL	104.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MKG311X2	DV34#643	IFEA	22-SEP-93	15-OCT-93	50	43 UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	MDG613X1	DV34#645	ETNA	25-JUN-93	14-JUL-93	50	51 UGL	102.0
BNA'S IN WATER BY GC/MS	UM18	NBD5	SBK93122	V1A#348	CKWA	12-FEB-93	18-FEB-93	50		

		avg minimum maximum								
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG612X1	DV34#584	ETKA	24-JUN-93	07-JUL-93	100	92 UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG612X2	DV34#585	IFGA	24-SEP-93	12-OCT-93	100	88 UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG613X1	DV34#586	ETNA	25-JUN-93	14-JUL-93	100	86 UGL	86.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG613X2	DV34#587	IFDA	20-SEP-93	19-OCT-93	100	90 UGL	90.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG614X1	DV34#588	ETNA	25-JUN-93	14-JUL-93	100	88 UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG614X2	DV34#589	IFGA	24-SEP-93	12-OCT-93	100	92 UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG310X1	DV34#635	ETKA	24-JUN-93	07-JUL-93	100	100 UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG311X1	DV34#636	ETKA	24-JUN-93	07-JUL-93	100	100 UGL	100.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK93123	DV34#641	ETKA	24-JUN-93	07-JUL-93	100	88 UGL	88.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK93123	DV34#641	ETKA	24-JUN-93	07-JUL-93	100	98 UGL	98.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MKG311X2	DV34#643	IFEA	22-SEP-93	15-OCT-93	100	110 UGL	110.0
BNA'S IN WATER BY GC/MS	UM18	PHEND6	MDG613X1	DV34#645	ETNA	25-JUN-93	14-JUL-93	100		
BNA'S IN WATER BY GC/MS	UM18	PHEND6	SBK93122	V1A#348	CKWA	12-FEB-93	18-FEB-93	100		

Table FS-11
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
SVOC SURROGATES

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery

		avg								92.3
		minimum								84.0
		maximum								110.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14								
BNA'S IN WATER BY GC/MS	UM18	MXG612X1	DV3W*584	ETKA	24-JUN-93	07-JUL-93	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	MXG612X2	DV3W*585	IFGA	24-SEP-93	12-OCT-93	50	30	UGL	60.0
BNA'S IN WATER BY GC/MS	UM18	MXG613X1	DV3W*586	ETNA	25-JUN-93	14-JUL-93	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	MXG613X2	DV3W*587	IFDA	20-SEP-93	19-OCT-93	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	MXG614X1	DV3W*588	ETNA	25-JUN-93	14-JUL-93	50	39	UGL	78.0
BNA'S IN WATER BY GC/MS	UM18	MXG614X2	DV3W*589	IFGA	24-SEP-93	12-OCT-93	50	26	UGL	52.0
BNA'S IN WATER BY GC/MS	UM18	MXG310X1	DV3W*635	ETKA	24-JUN-93	07-JUL-93	50	65	UGL	130.0
BNA'S IN WATER BY GC/MS	UM18	MXG311X1	DV3W*636	ETKA	24-JUN-93	07-JUL-93	50	46	UGL	92.0
BNA'S IN WATER BY GC/MS	UM18	SBK93123	DV3W*641	ETKA	24-JUN-93	07-JUL-93	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	SBK93123	DV3W*641	ETKA	24-JUN-93	07-JUL-93	50	38	UGL	76.0
BNA'S IN WATER BY GC/MS	UM18	MXG310X2	DV3W*642	IFEA	22-SEP-93	15-OCT-93	50	35	UGL	70.0
BNA'S IN WATER BY GC/MS	UM18	MXG311X2	DV3W*643	IFEA	22-SEP-93	15-OCT-93	50	36	UGL	72.0
BNA'S IN WATER BY GC/MS	UM18	MDG613X1	DV3W*645	ETNA	25-JUN-93	14-JUL-93	50	47	UGL	94.0
BNA'S IN WATER BY GC/MS	UM18	TRPD14	V1AW*348	CKWA	12-FEB-93	18-FEB-93	50	67	UGL	134.0

		avg								85.1
		minimum								52.0
		maximum								134.0

SQL> HOST d:\util\LIST
SQL> SELECT * FROM CAT;

Table FS-12
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
VOC SURROGATES

USATHAMA Method Code	Method Description	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery
LM19	VOC'S IN SOIL BY GC/MS	8X501100	DV3S*570	EMKA	02-JUN-93	11-JUN-93	.05	.048 UGG	96.0
LM19	VOC'S IN SOIL BY GC/MS	8X501100	DV3S*570	EMKA	02-JUN-93	11-JUN-93	.05	.046 UGG	92.0
LM19	VOC'S IN SOIL BY GC/MS	8X501100	DV3S*570	EMKA	02-JUN-93	11-JUN-93	.05	.045 UGG	90.0
LM19	VOC'S IN SOIL BY GC/MS	8X501105	DV3S*571	EMKA	02-JUN-93	11-JUN-93	.05	.048 UGG	96.0
LM19	VOC'S IN SOIL BY GC/MS	8X501110	DV3S*572	EMKA	02-JUN-93	11-JUN-93	.05	.048 UGG	96.0
LM19	VOC'S IN SOIL BY GC/MS	8X501207	DV3S*573	EMOA	02-JUN-93	16-JUN-93	.05	.003 UGG	6.0
LM19	VOC'S IN SOIL BY GC/MS	8X501307	DV3S*574	EMKA	02-JUN-93	11-JUN-93	.05	.045 UGG	90.0
LM19	VOC'S IN SOIL BY GC/MS	8X501402	DV3S*575	EMKA	03-JUN-93	15-JUN-93	.05	.043 UGG	86.0
LM19	VOC'S IN SOIL BY GC/MS	8X501404	DV3S*576	EMKA	03-JUN-93	16-JUN-93	.05	.046 UGG	92.0
LM19	VOC'S IN SOIL BY GC/MS	8X501500	DV3S*577	EMJA	02-JUN-93	10-JUN-93	.05	.043 UGG	86.0
LM19	VOC'S IN SOIL BY GC/MS	8X501600	DV3S*578	EMMA	02-JUN-93	15-JUN-93	.05	.042 UGG	84.0
LM19	VOC'S IN SOIL BY GC/MS	8X501610	DV3S*579	EMMA	02-JUN-93	15-JUN-93	.05	.041 UGG	82.0
LM19	VOC'S IN SOIL BY GC/MS	8X661200	DV3S*580	EMMA	02-JUN-93	16-JUN-93	.05	.049 UGG	98.0
LM19	VOC'S IN SOIL BY GC/MS	8X661200	DV3S*580	EMMA	02-JUN-93	16-JUN-93	.05	.048 UGG	96.0
LM19	VOC'S IN SOIL BY GC/MS	8X661205	DV3S*581	EMKA	01-JUN-93	11-JUN-93	.05	.047 UGG	94.0
LM19	VOC'S IN SOIL BY GC/MS	8X661210	DV3S*582	EMKA	01-JUN-93	11-JUN-93	.05	.044 UGG	88.0
LM19	VOC'S IN SOIL BY GC/MS	8X501210	DV3S*603	EMMA	02-JUN-93	10-JUN-93	.05	.043 UGG	86.0
LM19	VOC'S IN SOIL BY GC/MS	8X501310	DV3S*604	EMMA	02-JUN-93	16-JUN-93	.05	.051 UGG	102.0
LM19	VOC'S IN SOIL BY GC/MS	8X501704	DV3S*700	YGTB	12-AUG-94	23-AUG-94	.05	.045 UGG	90.0
LM19	VOC'S IN SOIL BY GC/MS	8X501706	DV3S*701	YGTB	12-AUG-94	23-AUG-94	.05	.052 UGG	104.0
LM19	VOC'S IN SOIL BY GC/MS	8X501708	DV3S*702	YGTB	12-AUG-94	23-AUG-94	.05	.052 UGG	104.0
LM19	VOC'S IN SOIL BY GC/MS	8X501171	DV3S*704	YGTB	15-AUG-94	23-AUG-94	.05	.054 UGG	112.0
LM19	VOC'S IN SOIL BY GC/MS	8X501172	DV3S*705	YGTB	15-AUG-94	23-AUG-94	.05	.054 UGG	108.0
LM19	VOC'S IN SOIL BY GC/MS	8X501172	DV3S*706	YGTB	15-AUG-94	23-AUG-94	.05	.054 UGG	108.0
LM19	VOC'S IN SOIL BY GC/MS	8X501172	DV3S*707	YGTB	15-AUG-94	23-AUG-94	.05	.054 UGG	100.0
LM19	VOC'S IN SOIL BY GC/MS	8X501174	DV3S*708	YGTB	15-AUG-94	27-AUG-94	.05	.057 UGG	114.0
LM19	VOC'S IN SOIL BY GC/MS	8X501179	DV3S*709	YGTB	17-AUG-94	23-AUG-94	.05	.054 UGG	108.0
LM19	VOC'S IN SOIL BY GC/MS	8D501708	DV3S*751	YGTB	12-AUG-94	23-AUG-94	.05	.058 UGG	116.0
LM19	VOC'S IN SOIL BY GC/MS	8D501708	DV3S*751	YGTB	12-AUG-94	23-AUG-94	.05	.056 UGG	112.0
LM19	VOC'S IN SOIL BY GC/MS	*****							
	avg								95.3
	minimum								6.0
	maximum								116.0

VOC SURROGATES

USATHAMA		IRDMIS						Percent...		
Method	Test	Sample	Field	Lab	Sample	Analysis	Spike	Value	Units	Recovery
Code	Name	Number	Number	Number	Lot	Date	Value			
LM19	4BFB	BM501100		DV3S*570	EMKA	02-JUN-93		.054	UGG	108.0
LM19	4BFB	BM501100		DV3S*570	EMKA	02-JUN-93	.05	.052	UGG	104.0
LM19	4BFB	BM501100		DV3S*570	EMKA	02-JUN-93	.05	.052	UGG	104.0
LM19	4BFB	BM501105		DV3S*571	EMKA	02-JUN-93	.05	.055	UGG	110.0
LM19	4BFB	BM501110		DV3S*572	EMKA	02-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501207		DV3S*573	EMQA	02-JUN-93	.05	.003	UGG	6.0
LM19	4BFB	BM501307		DV3S*574	EMKA	02-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501402		DV3S*575	EMNA	03-JUN-93	.05	.049	UGG	98.0
LM19	4BFB	BM501404		DV3S*576	EMNA	03-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501500		DV3S*577	EMJA	02-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501600		DV3S*578	EMMA	02-JUN-93	.05	.055	UGG	110.0
LM19	4BFB	BM501610		DV3S*579	EMMA	02-JUN-93	.05	.055	UGG	110.0
LM19	4BFB	BM501610		DV3S*580	EMMA	02-JUN-93	.05	.055	UGG	110.0
LM19	4BFB	BM501610		DV3S*580	EMMA	02-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*580	EMMA	02-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*580	EMMA	02-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*581	EMKA	01-JUN-93	.05	.057	UGG	114.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.054	UGG	108.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.053	UGG	106.0
LM19	4BFB	BM501610		DV3S*582	EMKA	01-JUN-93	.05	.056	UGG	112.0
LM19	4BFB	BM501610		D						

VOC SURROGATES

94.3

Table FS-12
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3,5 and 6
VOC SURROGATES

Method Description	USATHAMA Method Code	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
										4.0 106.0
VOC'S IN WATER BY GC/MS	UM20	MXG612X1	DV3M*584	FGGA	24-JUN-93	30-JUN-93	50	54	UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	MXG612X2	DV3M*585	ICGA	24-SEP-93	28-SEP-93	50	56	UGL	112.0
VOC'S IN WATER BY GC/MS	UM20	MXG613X1	DV3M*586	FGGA	25-JUN-93	28-JUN-93	50	59	UGL	118.0
VOC'S IN WATER BY GC/MS	UM20	MXG613X2	DV3M*587	ICFA	20-SEP-93	27-SEP-93	50	60	UGL	120.0
VOC'S IN WATER BY GC/MS	UM20	MXG614X1	DV3M*588	FGGA	25-JUN-93	30-JUN-93	50	56	UGL	112.0
VOC'S IN WATER BY GC/MS	UM20	MXG614X2	DV3M*589	ICGA	24-SEP-93	28-SEP-93	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	SBK93118	DV3M*599	DYZA	03-JUN-93	10-JUN-93	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	SBK93119	DV3M*600	DYZA	03-JUN-93	10-JUN-93	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	SBK93119	DV3M*600	DYZA	03-JUN-93	10-JUN-93	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	MXG310X1	DV3M*635	FGGA	24-JUN-93	30-JUN-93	50	56	UGL	112.0
VOC'S IN WATER BY GC/MS	UM20	MXG311X1	DV3M*636	FGGA	24-JUN-93	28-JUN-93	50	58	UGL	116.0
VOC'S IN WATER BY GC/MS	UM20	SBK93123	DV3M*641	FGGA	24-JUN-93	28-JUN-93	50	58	UGL	116.0
VOC'S IN WATER BY GC/MS	UM20	MXG310X2	DV3M*642	ICFA	22-SEP-93	27-SEP-93	50	62	UGL	124.0
VOC'S IN WATER BY GC/MS	UM20	MXG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	50	54	UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	MXG610X4	DV3M*715	XDVE	04-OCT-94	10-OCT-94	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	MXG612X4	DV3M*719	XDVE	04-OCT-94	10-OCT-94	50	56	UGL	112.0
VOC'S IN WATER BY GC/MS	UM20	MXG613X4	DV3M*723	XDVE	06-OCT-94	12-OCT-94	50	60	UGL	120.0
VOC'S IN WATER BY GC/MS	UM20	MXG614X4	DV3M*731	XDVE	06-OCT-94	10-OCT-94	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	MXG615A4	DV3M*735	XDVE	05-OCT-94	12-OCT-94	50	59	UGL	118.0
VOC'S IN WATER BY GC/MS	UM20	MXG616X4	DV3M*739	XDVE	05-OCT-94	10-OCT-94	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	MXG617A4	DV3M*743	XDVE	05-OCT-94	10-OCT-94	50	57	UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP212	DV3M*754	XDVE	06-OCT-94	10-OCT-94	50	54	UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP212	DV3M*754	XDVE	06-OCT-94	10-OCT-94	50	54	UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	MXG619X1	DV3M*755	XDRG	06-FEB-95	08-FEB-95	50	56	UGL	112.0
VOC'S IN WATER BY GC/MS	UM20	MXG620X1	DV3M*756	XDRG	06-FEB-95	08-FEB-95	50	56	UGL	112.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP757	DV3M*757	XDRG	06-FEB-95	08-FEB-95	50	56	UGL	112.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP757	DV3M*757	XDRG	06-FEB-95	08-FEB-95	50	56	UGL	112.0

Table FS-12
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6
VOC SURROGATES

Method Description	USATHAWA Method Code	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery
VOC'S IN WATER BY GC/MS	UM20	DVTRP791	DV3M*791	XDDE	12-AUG-94	19-AUG-94	50	54 UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP791	DV3M*791	XDDE	12-AUG-94	19-AUG-94	50	54 UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	DV3M*792	DV3M*792	XDDE	18-AUG-94	31-AUG-94	50	51 UGL	102.0
VOC'S IN WATER BY GC/MS	UM20	DV3M*792	DV3M*792	XDDE	18-AUG-94	31-AUG-94	50	51 UGL	102.0
VOC'S IN WATER BY GC/MS	UM20	TRP93054	DVTRP*54	DYZA	02-JUN-93	10-JUN-93	50	58 UGL	116.0
VOC'S IN WATER BY GC/MS	UM20	TRP93055	DVTRP*55	DYZA	03-JUN-93	10-JUN-93	50	57 UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP057	DVTRP*57	DYZA	04-JUN-93	11-JUN-93	50	57 UGL	114.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP058	DVTRP*58	FGEA	24-JUN-93	28-JUN-93	50	58 UGL	116.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP059	DVTRP*59	FGEA	25-JUN-93	30-JUN-93	50	54 UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	SRK93122	V1A#348	DDMA	12-FEB-93	15-FEB-93	50	54 UGL	108.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP153	VTRP*153	ICFA	22-SEP-93	27-SEP-93	50	61 UGL	122.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP141	VTRP*154	ICFA	23-SEP-93	27-SEP-93	50	61 UGL	122.0
VOC'S IN WATER BY GC/MS	UM20	DVTRP147	VTRP*156	ICFA	24-SEP-93	27-SEP-93	50	60 UGL	120.0

avg									113.4
minimum									102.0
maximum									124.0
VOC'S IN WATER BY GC/MS	UM20	MXG612X1	DV3M*584	FGEA	24-JUN-93	30-JUN-93	50	42 UGL	84.0
VOC'S IN WATER BY GC/MS	UM20	MXG612X2	DV3M*585	ICGA	24-SEP-93	28-SEP-93	50	43 UGL	86.0
VOC'S IN WATER BY GC/MS	UM20	MXG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	50	45 UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MXG613X2	DV3M*587	ICFA	20-SEP-93	27-SEP-93	50	44 UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MXG614X1	DV3M*588	FGEA	25-JUN-93	30-JUN-93	50	46 UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MXG614X2	DV3M*589	ICGA	24-SEP-93	28-SEP-93	50	44 UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	SRK93118	DV3M*599	DYZA	03-JUN-93	10-JUN-93	50	45 UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	SRK93119	DV3M*600	DYZA	03-JUN-93	10-JUN-93	50	45 UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	SRK93119	DV3M*600	DYZA	03-JUN-93	10-JUN-93	50	46 UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MXG310X1	DV3M*635	FGEA	24-JUN-93	30-JUN-93	50	45 UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MXG311X1	DV3M*636	FGEA	24-JUN-93	28-JUN-93	50	46 UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	SRK93123	DV3M*641	FGEA	24-JUN-93	28-JUN-93	50	45 UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	SRK93123	DV3M*641	FGEA	24-JUN-93	28-JUN-93	50	45 UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MXG310X2	DV3M*642	ICFA	22-SEP-93	27-SEP-93	50	44 UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MXG311X2	DV3M*643	ICFA	22-SEP-93	27-SEP-93	50	45 UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MDG613X1	DV3M*645	FGEA	25-JUN-93	30-JUN-93	50	46 UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MXG610X4	DV3M*715	XDVE	04-OCT-94	10-OCT-94	50	48 UGL	96.0
VOC'S IN WATER BY GC/MS	UM20	MXG612X4	DV3M*719	XDVE	04-OCT-94	10-OCT-94	50	46 UGL	92.0

Table FS-12
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6

VOC SURROGATES

USATHAMA Method Code	Method Description	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG613X4	DV3M*723	XDVE	06-OCT-94	10-OCT-94	50	47	UGL	94.0
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG614X4	DV3M*727	XDWE	05-OCT-94	12-OCT-94	50	44	UGL	88.0
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG615A4	DV3M*731	XDVE	06-OCT-94	10-OCT-94	50	46	UGL	92.0
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG618X4	DV3M*735	XDWE	05-OCT-94	12-OCT-94	50	45	UGL	90.0
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG616X4	DV3M*739	XDVE	05-OCT-94	10-OCT-94	50	45	UGL	90.0
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG617A4	DV3M*743	XDVE	05-OCT-94	10-OCT-94	50	46	UGL	92.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP212	DV3M*754	XDVE	06-OCT-94	10-OCT-94	50	47	UGL	94.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP212	DV3M*754	XDVE	06-OCT-94	10-OCT-94	50	47	UGL	94.0
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG619X1	DV3M*755	XDRG	06-FEB-95	08-FEB-95	50	44	UGL	88.0
UM20	VOC'S IN WATER BY GC/MS	48FB	MXG620X1	DV3M*756	XDRG	06-FEB-95	10-FEB-95	50	44	UGL	88.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP757	DV3M*757	XDRG	06-FEB-95	08-FEB-95	50	43	UGL	86.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP757	DV3M*757	XDRG	06-FEB-95	08-FEB-95	50	43	UGL	86.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP757	DV3M*757	XDRG	06-FEB-95	08-FEB-95	50	43	UGL	86.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP791	DV3M*791	XDEE	12-AUG-94	19-AUG-94	50	44	UGL	88.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP791	DV3M*791	XDEE	12-AUG-94	19-AUG-94	50	44	UGL	88.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DV3M*792	DV3M*792	XDEE	18-AUG-94	31-AUG-94	50	41	UGL	82.0
UM20	VOC'S IN WATER BY GC/MS	48FB	TRP93054	DVTRP*54	DYZA	02-JUN-93	10-JUN-93	50	46	UGL	92.0
UM20	VOC'S IN WATER BY GC/MS	48FB	TRP93055	DVTRP*55	DYZA	03-JUN-93	10-JUN-93	50	45	UGL	90.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP057	DVTRP*57	DYYA	04-JUN-93	11-JUN-93	50	48	UGL	96.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP058	DVTRP*58	FGEA	24-JUN-93	28-JUN-93	50	43	UGL	86.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP059	DVTRP*59	FGEA	25-JUN-93	30-JUN-93	50	43	UGL	86.0
UM20	VOC'S IN WATER BY GC/MS	48FB	SK93122	V1AN*348	DDMA	12-FEB-93	15-FEB-93	50	44	UGL	88.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP153	VTRP*153	ICFA	22-SEP-93	27-SEP-93	50	45	UGL	90.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP141	VTRP*154	ICFA	23-SEP-93	27-SEP-93	50	44	UGL	88.0
UM20	VOC'S IN WATER BY GC/MS	48FB	DVTRP147	VTRP*156	ICFA	24-SEP-93	27-SEP-93	50	43	UGL	86.0

	avg										89.5
	minimum										82.0
	maximum										96.0
UM20	VOC'S IN WATER BY GC/MS	MEC608	MXG612X1	DV3M*584	FGEA	24-JUN-93	30-JUN-93	50	45	UGL	90.0
UM20	VOC'S IN WATER BY GC/MS	MEC608	MXG612X2	DV3M*585	ICGA	24-SEP-93	28-SEP-93	50	45	UGL	90.0
UM20	VOC'S IN WATER BY GC/MS	MEC608	MXG613X1	DV3M*586	FGEA	25-JUN-93	28-JUN-93	50	47	UGL	94.0
UM20	VOC'S IN WATER BY GC/MS	MEC608	MXG613X2	DV3M*587	ICFA	20-SEP-93	27-SEP-93	50	46	UGL	92.0
UM20	VOC'S IN WATER BY GC/MS	MEC608	MXG614X1	DV3M*588	FGEA	25-JUN-93	30-JUN-93	50	49	UGL	98.0

Table FS-12
Chemical Quality Control Report
Installation: Fort Devens, MA (DV)
Groups 3, 5 and 6
VOC SURROGATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value	Units	Percent Recovery
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG614X2	DV3M*589	ICGA	24-SEP-93	28-SEP-93	50	45	UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK93118	DV3M*599	DYZA	03-JUN-93	10-JUN-93	50	44	UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK93118	DV3M*599	DYZA	03-JUN-93	10-JUN-93	50	44	UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK93119	DV3M*600	DYZA	03-JUN-93	10-JUN-93	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK93119	DV3M*600	DYZA	03-JUN-93	10-JUN-93	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG310X1	DV3M*635	FGGA	24-JUN-93	30-JUN-93	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG311X1	DV3M*636	FGGA	24-JUN-93	28-JUN-93	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK93123	DV3M*641	FGGA	24-JUN-93	28-JUN-93	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK93123	DV3M*641	FGGA	24-JUN-93	28-JUN-93	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG310X2	DV3M*642	ICFA	22-SEP-93	27-SEP-93	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG311X2	DV3M*643	ICFA	22-SEP-93	27-SEP-93	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MDG613X1	DV3M*645	FGGA	25-JUN-93	30-JUN-93	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG610X4	DV3M*715	XOVE	04-OCT-94	10-OCT-94	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG612X4	DV3M*719	XOVE	04-OCT-94	10-OCT-94	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG613X4	DV3M*723	XOVE	06-OCT-94	10-OCT-94	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG614X4	DV3M*727	XOME	05-OCT-94	12-OCT-94	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG615A4	DV3M*731	XOME	06-OCT-94	10-OCT-94	50	45	UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG618X4	DV3M*735	XOME	05-OCT-94	12-OCT-94	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG616X4	DV3M*739	XOVE	05-OCT-94	10-OCT-94	50	44	UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG617A4	DV3M*743	XOVE	05-OCT-94	10-OCT-94	50	44	UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP212	DV3M*754	XOVE	06-OCT-94	10-OCT-94	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP212	DV3M*754	XOVE	06-OCT-94	10-OCT-94	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG619X1	DV3M*755	XORG	06-FEB-95	08-FEB-95	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	MXG620X1	DV3M*756	XDSG	06-FEB-95	10-FEB-95	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP757	DV3M*757	XORG	06-FEB-95	08-FEB-95	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP757	DV3M*757	XORG	06-FEB-95	08-FEB-95	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP791	DV3M*791	XODE	12-AUG-94	19-AUG-94	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP791	DV3M*791	XODE	12-AUG-94	19-AUG-94	50	47	UGL	94.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DV3M*792	DV3M*792	XODE	18-AUG-94	31-AUG-94	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	TRP93054	DVTRP*54	DYZA	02-JUN-93	10-JUN-93	50	45	UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	TRP93055	DVTRP*55	DYZA	03-JUN-93	10-JUN-93	50	45	UGL	90.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP057	DVTRP*57	DYFA	04-JUN-93	11-JUN-93	50	44	UGL	88.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP058	DVTRP*58	FGGA	24-JUN-93	28-JUN-93	50	46	UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP059	DVTRP*59	FGGA	25-JUN-93	30-JUN-93	50	46	UGL	92.0

Table FS-12
 Chemical Quality Control Report
 Installation: Fort Devens, MA (OV)
 Groups 3,5 and 6
 VOC SURROGATES

Method Description	USATHAMA Method Code	Test Name	IRDMIS Field Sample Number	Lab Number	Lot	Sample Date	Analysis Date	Spike Value	Value Units	Percent Recovery
VOC'S IN WATER BY GC/MS	UM20	MEC608	SBK93122	VIAW*348	DDMA	12-FEB-93	15-FEB-93	50	46 UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP153	VTRP*153	ICFA	22-SEP-93	27-SEP-93	50	46 UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP141	VTRP*154	ICFA	23-SEP-93	27-SEP-93	50	46 UGL	92.0
VOC'S IN WATER BY GC/MS	UM20	MEC608	DVTRP147	VTRP*156	ICFA	24-SEP-93	27-SEP-93	50	45 UGL	90.0

		avg								92.0
		minimum								88.0
		maximum								98.0

APPENDIX G
BACKGROUND CONCENTRATION CALCULATIONS

CALCULATED BACKGROUND CONCENTRATIONS FORT DEVENS, MASSACHUSETTS

SOIL		GROUNDWATER	
ANALYTE	CONCENTRATION (ug/g)	ANALYTE	CONCENTRATION (ug/L)
Aluminum	15,000	Aluminum	6,870
Antimony	--	Antimony	3.03
Arsenic	21	Arsenic	10.5
Barium	42.5	Barium	39.6
Beryllium	0.347	Beryllium	5.00
Cadmium	2.00	Cadmium	4.01
Calcium	1,400	Calcium	14,700
Chromium	31	Chromium	14.7
Cobalt	--	Cobalt	25.0
Copper	8.39	Copper	8.09
Iron	15,000	Iron	9,100
Lead	48.4 ¹	Lead	4.25
Magnesium	5,600	Magnesium	3,480
Manganese	300	Manganese	291
Mercury	0.22	Mercury	0.243
Nickel	14.0	Nickel	34.3
Potassium	1,700	Potassium	2,370
Selenium	--	Selenium	3.02
Silver	.086	Silver	4.60
Sodium	131	Sodium	10,800
Thallium	--	Thallium	6.99
Vanadium	28.7	Vanadium	11.0
Zinc	35.5	Zinc	21.1

¹For lead in soil, the background value was revised to 34.4 ug/g for the later phases of the SIs, based on the removal of a possible statistical outlier.

**SOIL BACKGROUND CONCENTRATIONS
REPRESENTATIVE SAMPLES
FORT DEVENS, MASSACHUSETTS**

SAMPLE I.D.	LOCATION	SOIL ASSOCIATION	SAMPLE TYPE
SOIL - 1	North Post	Hinkley	Surface
SOIL - 2	North Post	Quonset	Surface
SOIL - 3	North Post	Quonset	Surface
SOIL - 4	North Post	Winooski	Surface
SOIL - 5	Main Post	Hinkley	Surface
SOIL - 6	Main Post	Hinkley	Surface
SOIL - 7	Main Post	Hinkley	Surface
SOIL - 8	Main Post	Hinkley	Surface
SOIL - 9	Main Post	Paxton	Surface
SOIL - 10	Main Post	Winooski	Surface
SOIL - 11	Main Post	Winooski	Surface
SOIL - 12	Main Post	Winooski	Surface
SOIL - 13	Main Post	Paxton	Surface
SOIL - 14	South Post	Hinkley	Surface
SOIL - 15	South Post	Winooski	Surface
SOIL - 16	South Post	Paxton	Surface
SOIL - 17	Main Post	Hinkley	Boring
SOIL - 18	Main Post	Hinkley	Boring
SOIL - 19	Main Post	Hinkley	Boring
SOIL - 20	Main Post	Hinkley	Boring

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
ALUMINUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 8	2500	
SOIL - 17	4300	
SOIL - 1	6400	
SOIL - 14	6900	
SOIL - 19	7100	Minimum - 2500
SOIL - 20	7100	
SOIL - 12	7400	Maximum - 24000
SOIL - 15	8000	
SOIL - 10	8500	
SOIL - 4	8800	Mean - 10000
SOIL - 5	9900	
SOIL - 11	11000	95th %ile - 15000
SOIL - 18	11000	
SOIL - 3	12000	
SOIL - 7	12000	
SOIL - 6	13000	Background Concentration - 15000
SOIL - 16	13000	
SOIL - 2	14000	
SOIL - 13	18000	
SOIL - 9	24000	
ANTIMONY		
NO DATA AVAILABLE		
ARSENIC		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 15	4.6	
SOIL - 12	7.1	
SOIL - 3	9.3	
SOIL - 4	9.4	
SOIL - 17	9.5	
SOIL - 1	9.6	Minimum - 4.6
SOIL - 14	11	
SOIL - 19	11	Maximum - 32
SOIL - 16	11	
SOIL - 5	12	Mean - 14
SOIL - 11	13	
SOIL - 2	13	95th %ile - 21
SOIL - 10	14	
SOIL - 7	15	
SOIL - 8	15	
SOIL - 20	19	Background Concentration - 21
SOIL - 9	25	
SOIL - 13	28	
SOIL - 6	32	
SOIL - 18	99 **	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
BARIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 17	9.7	
SOIL - 10	11.5	
SOIL - 6	11.5	
SOIL - 12	12.9	
SOIL - 1	14.2	
SOIL - 4	14.2	Minimum - 9.7
SOIL - 19	14.2	
SOIL - 3	14.5	Maximum - 67.2
SOIL - 5	15.5	
SOIL - 8	15.6	Mean - 25.8
SOIL - 15	16.2	
SOIL - 14	16.6	95th %ile - 42.5
SOIL - 18	29.0	
SOIL - 20	31.0	
SOIL - 2	35.0	
SOIL - 7	36.0	Background Concentration - 42.5
SOIL - 16	46.0	
SOIL - 11	52.0	
SOIL - 9	54.0	
SOIL - 13	67.2	
BERYLLIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 10	0.039	
SOIL - 18	0.039	
SOIL - 3	0.039	
SOIL - 17	0.039	
SOIL - 19	0.104	
SOIL - 6	0.108	Minimum - 0.039
SOIL - 1	0.119	
SOIL - 5	0.124	Maximum - 0.672
SOIL - 2	0.126	
SOIL - 7	0.133	Mean - 0.185
SOIL - 4	0.141	
SOIL - 8	0.142	95th %ile - 0.347
SOIL - 15	0.145	
SOIL - 14	0.146	
SOIL - 12	0.172	
SOIL - 20	0.188	Background Concentration - 0.347
SOIL - 9	0.335	
SOIL - 11	0.350	
SOIL - 16	0.533	
SOIL - 13	0.672	

* Method Detection Limit

** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
CADMIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 1	0.212	
SOIL - 20	0.212	
SOIL - 12	0.212	
SOIL - 3	0.212	
SOIL - 4	0.212	
SOIL - 5	0.212	Minimum - 0.212
SOIL - 19	0.212	
SOIL - 17	0.212	Maximum - 4.48
SOIL - 15	0.212	
SOIL - 8	0.212	Mean - 0.823
SOIL - 18	0.212	
SOIL - 16	0.212	95th %ile - 2.00
SOIL - 2	0.212	
SOIL - 14	0.212	
SOIL - 7	1.060	
SOIL - 9	1.060	Background Concentration - 2.00
SOIL - 6	1.280	
SOIL - 10	2.100	
SOIL - 13	3.520	
SOIL - 11	4.480	
CALCIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 15	144	
SOIL - 8	310	
SOIL - 3	330	
SOIL - 17	350	
SOIL - 5	430	Minimum - 144
SOIL - 2	610	
SOIL - 1	610	Maximum - 2800
SOIL - 4	630	
SOIL - 18	650	Mean - 840
SOIL - 9	650	
SOIL - 6	710	95th %ile - 1400
SOIL - 19	710	
SOIL - 16	720	
SOIL - 14	740	
SOIL - 12	810	
SOIL - 20	810	Background Concentration - 1400
SOIL - 7	1400	
SOIL - 13	1500	
SOIL - 11	1800	
SOIL - 10	2800	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
CHROMIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 15	2.0	
SOIL - 12	6.0	
SOIL - 1	7.1	
SOIL - 3	7.6	
SOIL - 17	7.7	
SOIL - 5	8.2	Minimum - 2.0
SOIL - 20	9.3	
SOIL - 8	9.6	Maximum - 56.5
SOIL - 4	10.2	
SOIL - 2	11.1	Mean - 17.7
SOIL - 1	12.5	
SOIL - 14	13.8	95th %ile - 31.3
SOIL - 19	14.1	
SOIL - 10	19.5	
SOIL - 11	27.1	
SOIL - 7	29.0	Background Concentration - 31
SOIL - 6	30.3	
SOIL - 13	33.0	
SOIL - 18	39.5	
SOIL - 9	56.5	
COBALT		
NO DATA AVAILABLE		
COPPER		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 3	0.98	
SOIL - 16	0.98	
SOIL - 12	0.98	
SOIL - 2	2.45	
SOIL - 15	2.52	
SOIL - 8	2.53	Minimum - 0.98
SOIL - 5	4.10	
SOIL - 17	4.78	Maximum - 12.0
SOIL - 4	4.81	
SOIL - 1	5.25	Mean - 5.24
SOIL - 20	5.48	
SOIL - 6	6.55	95th %ile - 8.39
SOIL - 14	6.86	
SOIL - 19	7.12	
SOIL - 9	7.62	
SOIL - 7	9.38	Background Concentration - 8.39
SOIL - 10	10.0	
SOIL - 18	12.0	
SOIL - 13	27.8 **	
SOIL - 11	30.2 **	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
IRON		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 14	5000	
SOIL - 10	5000	
SOIL - 1	6000	
SOIL - 17	6000	
SOIL - 15	6100	
SOIL - 5	6800	Minimum - 5000
SOIL - 12	6900	
SOIL - 4	7100	Maximum - 27000
SOIL - 19	7300	
SOIL - 20	7400	Mean - 9980
SOIL - 8	8200	
SOIL - 16	8500	95th %ile - 15000
SOIL - 3	9400	
SOIL - 11	11000	
SOIL - 2	12000	
SOIL - 13	15000	Background Concentration - 15000
SOIL - 6	17000	
SOIL - 18	18000	
SOIL - 9	27000	
SOIL - 7	50000 **	
LEAD		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 20	2.7	
SOIL - 17	3.4	
SOIL - 5	8.7	
SOIL - 1	9.7	
SOIL - 15	10.3	
SOIL - 8	11.0	Minimum - 2.70
SOIL - 18	11.3	
SOIL - 19	12.7	Maximum - 106.0
SOIL - 9	14.8	
SOIL - 2	16.3	Mean - 24.7
SOIL - 10	17.3	
SOIL - 3	18.6	95th %ile - 48.4
SOIL - 16	21.2	
SOIL - 4	25.3	
SOIL - 6	42.8	
SOIL - 12	42.9	Background Concentration - 48.4
SOIL - 7	46.6	
SOIL - 14	47.1	
SOIL - 11	106	
SOIL - 13	326 **	

* Method Detection Limit

** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
MAGNESIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 15	490	
SOIL - 3	700	
SOIL - 4	910	
SOIL - 12	1000	
SOIL - 5	1300	
SOIL - 1	1500	Minimum - 490
SOIL - 8	1800	
SOIL - 17	2000	Maximum - 11000
SOIL - 20	2200	
SOIL - 11	2300	Mean - 3100
SOIL - 2	2300	
SOIL - 10	2500	95th %ile - 5600
SOIL - 14	2600	
SOIL - 16	2700	
SOIL - 19	3200	
SOIL - 6	4500	Background Concentration - 5600
SOIL - 13	4900	
SOIL - 7	5500	
SOIL - 18	7900	
SOIL - 9	11000	
MANGANESE		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 3	73	
SOIL - 8	85	
SOIL - 5	87	
SOIL - 4	100	
SOIL - 17	110	
SOIL - 11	110	Minimum - 73
SOIL - 1	130	
SOIL - 19	130	Maximum - 460
SOIL - 14	130	
SOIL - 20	150	Mean - 190
SOIL - 12	170	
SOIL - 10	170	95th %ile - 300
SOIL - 16	190	
SOIL - 15	220	
SOIL - 6	230	
SOIL - 7	240	Background Concentration - 300
SOIL - 18	300	
SOIL - 13	350	
SOIL - 2	380	
SOIL - 9	460	

* Method Detection Limit

** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS	
MERCURY			
SAMPLE I.D.	CONCENTRATION ug/g		
SOIL - 5	0.013		
SOIL - 8	0.013		
SOIL - 20	0.013		
SOIL - 7	0.013		
SOIL - 19	0.013		
SOIL - 17	0.013	Minimum -	0.01
SOIL - 18	0.035		
SOIL - 1	0.042	Maximum -	0.41
SOIL - 16	0.053		
SOIL - 6	0.055	Mean -	0.10
SOIL - 14	0.056		
SOIL - 3	0.060	95th %ile -	0.22
SOIL - 15	0.068		
SOIL - 2	0.081		
SOIL - 9	0.085		
SOIL - 12	0.110	Background Concentration -	0.22
SOIL - 13	0.260		
SOIL - 10	0.290		
SOIL - 4	0.330		
SOIL - 11	0.410		
NICKEL			
SAMPLE I.D.	CONCENTRATION ug/g		
SOIL - 16	1.23		
SOIL - 1	1.23		
SOIL - 15	1.23		
SOIL - 3	1.23		
SOIL - 8	1.23		
SOIL - 5	1.23	Minimum -	1.2
SOIL - 4	1.23		
SOIL - 2	1.23	Maximum -	27.0
SOIL - 12	1.23		
SOIL - 11	1.23	Mean -	6.5
SOIL - 14	4.06		
SOIL - 17	4.80	95th %ile -	14.0
SOIL - 20	5.51		
SOIL - 19	5.91		
SOIL - 6	6.81		
SOIL - 7	11.2	Background Concentration -	14.0
SOIL - 10	12.5		
SOIL - 13	14.6		
SOIL - 18	24.4		
SOIL - 9	27.0		

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
POTASSIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 15	250	
SOIL - 4	310	
SOIL - 5	470	
SOIL - 3	530	
SOIL - 17	590	
SOIL - 12	600	Minimum - 250
SOIL - 1	620	
SOIL - 8	630	Maximum - 2400
SOIL - 2	660	
SOIL - 14	700	Mean - 1000
SOIL - 19	880	
SOIL - 10	990	95th %ile - 1700
SOIL - 20	1000	
SOIL - 11	1100	
SOIL - 6	1100	
SOIL - 18	1700	Background Concentration - 1700
SOIL - 7	1700	
SOIL - 13	2200	
SOIL - 9	2400	
SOIL - 16	2400	
SELENIUM		
NO DATA AVAILABLE		
SILVER		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 1	0.043	
SOIL - 20	0.043	
SOIL - 12	0.043	
SOIL - 3	0.043	
SOIL - 13	0.043	
SOIL - 5	0.043	Minimum - 0.043
SOIL - 1	0.043	
SOIL - 7	0.043	Maximum - 0.043
SOIL - 15	0.043	
SOIL - 9	0.043	Mean - 0.043
SOIL - 16	0.043	
SOIL - 2	0.043	95th %ile - NA
SOIL - 17	0.043	
SOIL - 8	0.043	
SOIL - 19	0.043	
SOIL - 4	0.043	Background Concentration - 0.086 *
SOIL - 10	0.043	
SOIL - 18	0.043	
SOIL - 6	0.210 **	
SOIL - 11	0.580 **	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
SODIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 1	26.0	
SOIL - 12	26.0	
SOIL - 15	26.0	
SOIL - 3	26.0	
SOIL - 8	26.0	
SOIL - 4	26.0	Minimum - 26.0
SOIL - 17	57.5	
SOIL - 2	58.6	Maximum - 231
SOIL - 5	71.2	
SOIL - 6	79.8	Mean - 79.7
SOIL - 9	85.8	
SOIL - 19	86.7	95th %ile - 131
SOIL - 20	93.9	
SOIL - 14	100	
SOIL - 7	117	
SOIL - 11	123	Background Concentration - 131
SOIL - 18	124	
SOIL - 16	130	
SOIL - 13	231	
SOIL - 10	680 **	
THALLIUM		
NO DATA AVAILABLE		
VANADIUM		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 17	6.1	
SOIL - 15	6.2	
SOIL - 10	6.5	
SOIL - 20	7.2	
SOIL - 1	7.6	
SOIL - 5	7.9	Minimum - 6.1
SOIL - 8	8.0	
SOIL - 19	9.9	Maximum - 46.6
SOIL - 4	11.7	
SOIL - 14	13.8	Mean - 17.0
SOIL - 12	16.3	
SOIL - 2	16.6	95th %ile - 28.7
SOIL - 16	17.5	
SOIL - 3	17.9	
SOIL - 11	18.1	
SOIL - 18	22.8	Background Concentration - 28.7
SOIL - 7	23.4	
SOIL - 6	32.3	
SOIL - 9	44.3	
SOIL - 13	46.6	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN SOIL FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
ZINC		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 17	11.2	
SOIL - 15	11.7	
SOIL - 8	13.2	
SOIL - 20	13.5	
SOIL - 4	13.6	
SOIL - 19	14.2	Minimum - 11.2
SOIL - 3	14.6	
SOIL - 5	14.7	Maximum - 40.0
SOIL - 1	16.5	
SOIL - 12	17.7	Mean - 23.9
SOIL - 14	22.2	
SOIL - 16	23.4	95th %ile - 35.5
SOIL - 2	27.7	
SOIL - 11	40.0	
SOIL - 18	40.0	
SOIL - 13	40.0	Background Concentration - 35.5
SOIL - 6	40.0	
SOIL - 10	40.0	
SOIL - 7	40.0	
SOIL - 9	130.0 **	

* Method Detection Limit

** Likely Statistical Outlier

**REVISED BACKGROUND CONCENTRATION
FOR LEAD IN SOIL
FORT DEVENS, MASSACHUSETTS**

DATA		CALCULATIONS
LEAD		
SAMPLE I.D.	CONCENTRATION ug/g	
SOIL - 20	2.7	
SOIL - 17	3.4	
SOIL - 5	8.7	
SOIL - 1	9.7	
SOIL - 15	10.3	
SOIL - 8	11.0	Minimum - 2.70
SOIL - 18	11.3	
SOIL - 19	12.7	Maximum - 47.1
SOIL - 9	14.8	
SOIL - 2	16.3	Mean - 20.2
SOIL - 10	17.3	
SOIL - 3	18.6	95th %ile - 34.4
SOIL - 16	21.2	
SOIL - 4	25.3	
SOIL - 6	42.8	
SOIL - 12	42.9	Background Concentration - 34.4
SOIL - 7	46.6	
SOIL - 14	47.1	
SOIL - 11	106 *	
SOIL - 13	326 *	

* Likely Statistical Outlier

**GROUNDWATER BACKGROUND CONCENTRATIONS
REPRESENTATIVE SAMPLES
FORT DEVENS, MASSACHUSETTS**

MONITORING WELL	LOCATION	TOTAL SUSPENDED SOLIDS (ug/L)	ALUMINUM (ug/L)
G6M-92-09X	NORTH POST	37,000	230
G6M-92-11X	NORTH POST	53,000	1,920
WWTMW-01	NORTH POST	20,000	2,330
WWTMW-13	NORTH POST	30,000	3,150
WWTMW-14	NORTH POST	25,000	9,130
G3M-92-01X	MAIN POST	<4,000	71
13M-92-01X	MAIN POST	-	7,270
12M-92-01X	SOUTH POST	-	179
27M-92-04X	SOUTH POST	-	8,700
28M-92-01X	SOUTH POST	-	2,280

INORGANIC ANALYTES IN WATER FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
ALUMINUM		
MONITORING WELL	CONCENTRATION (ug/L)	
G3M-92-01X	71	Minimum - 71
12M-92-01X	179	Maximum - 9140
G6M-92-09X	230	Mean - 3527
G6M-92-11X	1920	95th %ile - 6874
28M-92-01X	2280	Background Concentration - 6870
WWTMW-01	2330	
WWTMW-13	3150	
13M-92-01X	7270	
27M-92-04X	8700	
WWTMW-14	9140	
ANTIMONY		
MONITORING WELL	CONCENTRATION (ug/L)	
WWTMW-14	1.52	Minimum - 1.52
WWTMW-13	1.52	Maximum - 1.52
WWTMW-01	1.52	Mean - 1.52
G6M-92-11X	1.52	95th %ile - NA
G6M-92-09X	1.52	Background Concentration - 3.03 *
G3M-92-01X	1.52	
28M-92-01X	1.52	
27M-92-04X	1.52	
13M-92-01X	1.52	
12M-92-01X	1.52	
ARSENIC		
MONITORING WELL	CONCENTRATION (ug/L)	
G6M-92-11X	1.27	Minimum - 1.27
12M-92-01X	1.27	Maximum - 15.20
G6M-92-09X	1.27	Mean - 5.65
G3M-92-01X	1.77	95th %ile - 10.5
28M-92-01X	3.94	Background Concentration - 10.5
WWTMW-13	5.39	
WWTMW-01	9.81	
13M-92-01X	10.9	
WWTMW-14	15.2	
27M-92-04X	32.3 **	
BARIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
12M-92-01X	2.5	Minimum - 2.5
G6M-92-09X	7.6	Maximum - 52.0
G3M-92-01X	10.7	Mean - 22.6
WWTMW-01	12.4	95th %ile - 39.6
28M-92-01X	14.4	Background Concentration - 39.6
G6M-92-11X	16.1	
WWTMW-13	19.5	
13M-92-01X	44.5	
WWTMW-14	46.3	
27M-92-04X	52.0	

* Method Detection Limit

** Likely Statistical Outlier

INORGANIC ANALYTES IN WATER FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
BERYLLIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
G3M-92-01X	2.50	Minimum - 2.50
12M-92-01X	2.50	Maximum - 2.50
G6M-92-09X	2.50	Mean - 2.50
G6M-92-11X	2.50	95th %ile - NA
28M-92-01X	2.50	Background Concentration - 5.00 *
WWTMW-01	2.50	
WWTMW-13	2.50	
13M-92-01X	2.50	
27M-92-04X	2.50	
WWTMW-14	2.50	
CADMIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
WWTMW-14	2.01	Minimum - 2.01
WWTMW-13	2.01	Maximum - 2.01
WWTMW-01	2.01	Mean - 2.01
G6M-92-11X	2.01	95th %ile - NA
G6M-92-09X	2.01	Background Concentration - 4.01 *
G3M-92-01X	2.01	
28M-92-01X	2.01	
27M-92-04X	2.01	
13M-92-01X	2.01	
12M-92-01X	2.01	
CALCIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
12M-92-01X	179	Minimum - 179
28M-92-01X	1910	Maximum - 23200
WWTMW-14	2490	Mean - 7801
WWTMW-13	3280	95th %ile - 14747
G6M-92-11X	5780	Background Concentration - 14700
WWTMW-01	6940	
G3M-92-01X	7710	
27M-92-04X	8820	
G6M-92-09X	17700	
13M-92-01X	23200	
CHROMIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
G3M-92-01X	3.01	Minimum - 3.0
G6M-92-09X	3.01	Maximum - 18.7
28M-92-01X	3.01	Mean - 8.7
12M-92-01X	3.01	95th %ile - 14.7
WWTMW-01	6.04	Background Concentration - 14.7
G6M-92-11X	6.36	
WWTMW-13	10.1	
27M-92-04X	16.4	
13M-92-01X	16.9	
WWTMW-14	18.7	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN WATER FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
COBALT		
MONITORING WELL	CONCENTRATION (ug/L)	
G3M-92-01X	12.5	Minimum - 12.5
12M-92-01X	12.5	Maximum - 12.5
G6M-92-09X	12.5	Mean - 12.5
G6M-92-11X	12.5	95th %ile - NA
28M-92-01X	12.5	Background Concentration - 25.0 *
WWTMW-01	12.5	
WWTMW-13	12.5	
13M-92-01X	12.5	
27M-92-04X	12.5	
WWTMW-14	12.5	
COPPER		
MONITORING WELL	CONCENTRATION (ug/L)	
G3M-92-01X	4.05	Minimum - 4.05
WWTMW-14	4.05	Maximum - 6.52
28M-92-01X	4.05	Mean - 4.36
WWTMW-01	4.05	95th %ile - 5.2
G6M-92-09X	4.05	Background Concentration - 8.09 *
12M-92-01X	4.05	
G6M-92-11X	4.05	
WWTMW-13	6.52	
13M-92-01X	18.60 **	
27M-92-04X	19.00 **	
IRON		
MONITORING WELL	CONCENTRATION (ug/L)	
G3M-92-01X	171	Minimum - 171
G6M-92-09X	331	Maximum - 12900
12M-92-01X	373	Mean - 4611
G6M-92-11X	2390	95th %ile - 9104
28M-92-01X	2410	Background Concentration - 9100
WWTMW-01	3250	
WWTMW-13	3830	
WWTMW-14	9250	
27M-92-04X	11200	
13M-92-01X	12900	
LEAD		
MONITORING WELL	CONCENTRATION (ug/L)	
G6M-92-09X	0.65	Minimum - 0.65
WWTMW-01	2.00	Maximum - 5.70
28M-92-01X	2.17	Mean - 2.81
G3M-92-01X	2.30	95th %ile - 4.25
G6M-92-11X	2.30	Background Concentration - 4.25
WWTMW-13	3.10	
12M-92-01X	4.23	
WWTMW-14	5.70	
13M-92-01X	12.10 **	
27M-92-04X	12.40 **	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN WATER FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
MAGNESIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
28M-92-01X	693	Minimum - 693
G6M-92-11X	857	Maximum - 4500
G3M-92-01X	1000	Mean - 2157
WWTMW-13	1390	95th %ile - 3477
G6M-92-09X	1600	Background Concentration - 3480
WWTMW-01	1900	
WWTMW-14	1970	
27M-92-04X	3550	
12M-92-01X	4110	
13M-92-01X	4500	
MANGANESE		
MONITORING WELL	CONCENTRATION (ug/L)	
G6M-92-09X	23.4	Minimum - 23.40
12M-92-01X	69.9	Maximum - 486.00
WWTMW-01	77.7	Mean - 156.93
28M-92-01X	86.4	95th %ile - 290.7
G6M-92-11X	102	Background Concentration - 291
WWTMW-13	107	
13M-92-01X	227	
WWTMW-14	233	
G3M-92-01X	486	
27M-92-04X	1110 **	
MERCURY		
MONITORING WELL	CONCENTRATION (ug/L)	
WWTMW-01	0.12	Minimum - 0.12
G3M-92-01X	0.12	Maximum - 0.70
12M-92-01X	0.12	Mean - 0.18
13M-92-01X	0.12	95th %ile - 0.35
WWTMW-14	0.12	Background Concentration - 0.243 *
28M-92-01X	0.12	
G6M-92-11X	0.12	
G6M-92-09X	0.12	
27M-92-04X	0.12	
WWTMW-13	0.70	
NICKEL		
MONITORING WELL	CONCENTRATION (ug/L)	
G6M-92-09X	17.2	Minimum - 17.20
WWTMW-01	17.2	Maximum - 17.20
28M-92-01X	17.2	Mean - 17.20
G3M-92-01X	17.2	95th %ile - NA
G6M-92-11X	17.2	Background Concentration - 34.3 *
WWTMW-13	17.2	
12M-92-01X	17.2	
WWTMW-14	17.2	
13M-92-01X	17.2	
27M-92-04X	17.2	

* Method Detection Limit
** Likely Statistical Outlier

INORGANIC ANALYTES IN WATER FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
POTASSIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
28M-92-01X	461	Minimum - 461
G6M-92-11X	645	Maximum - 2790
WWTMW-13	1080	Mean - 1644
G3M-92-01X	1450	95th %ile - 2370
12M-92-01X	1500	Background Concentration - 2370
WWTMW-01	1980	
WWTMW-14	1980	
G6M-92-09X	1980	
13M-92-01X	2570	
27M-92-04X	2790	
SELENIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
G6M-92-09X	1.51	Minimum - 1.51
12M-92-01X	1.51	Maximum - 1.51
WWTMW-01	1.51	Mean - 1.51
28M-92-01X	1.51	95th %ile - NA
G6M-92-11X	1.51	Background Concentration - 3.02 *
WWTMW-13	1.51	
13M-92-01X	1.51	
WWTMW-14	1.51	
G3M-92-01X	1.51	
27M-92-04X	1.51	
SILVER		
MONITORING WELL	CONCENTRATION (ug/L)	
WWTMW-01	2.30	Minimum - 2.30
G3M-92-01X	2.30	Maximum - 2.30
12M-92-01X	2.30	Mean - 2.30
13M-92-01X	2.30	95th %ile - NA
WWTMW-14	2.30	Background Concentration - 4.60 *
28M-92-01X	2.30	
G6M-92-11X	2.30	
G6M-92-09X	2.30	
27M-92-04X	2.30	
WWTMW-13	2.30	
SODIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
28M-92-01X	1380	Minimum - 1380
G6M-92-09X	2000	Maximum - 18000
WWTMW-14	2100	Mean - 5771
G6M-92-11X	2430	95th %ile - 10841
27M-92-04X	3070	Background Concentration - 10800
12M-92-01X	4250	
WWTMW-13	4610	
G3M-92-01X	8570	
WWTMW-01	11300	
13M-92-01X	18000	

* Method Detection Limit

** Likely Statistical Outlier

INORGANIC ANALYTES IN WATER FORT DEVENS, MASSACHUSETTS

DATA		CALCULATIONS
THALLIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
28M-92-01X	3.50	Minimum - 3.50
G6M-92-11X	3.50	Maximum - 3.50
WWTMW-13	3.50	Mean - 3.50
G3M-92-01X	3.50	95th %ile - 3.50
12M-92-01X	3.50	Background Concentration - 6.99
WWTMW-01	3.50	
WWTMW-14	3.50	
G6M-92-09X	3.50	
13M-92-01X	3.50	
27M-92-04X	3.50	
VANADIUM		
MONITORING WELL	CONCENTRATION (ug/L)	
G6M-92-09X	5.50	Minimum - 5.50
12M-92-01X	5.50	Maximum - 14.50
WWTMW-01	5.50	Mean - 7.13
28M-92-01X	5.50	95th %ile - 10.41
G6M-92-11X	5.50	Background Concentration - 11.0 *
WWTMW-13	5.50	
13M-92-01X	5.50	
G3M-92-01X	5.50	
27M-92-04X	12.8	
WWTMW-14	14.5	
ZINC		
MONITORING WELL	CONCENTRATION (ug/L)	
WWTMW-13	10.6	Minimum - 10.6
G6M-92-09X	10.6	Maximum - 47.0
WWTMW-01	10.6	Mean - 20.5
28M-92-01X	10.6	95th %ile - 34.9
G6M-92-11X	10.6	Background Concentration - 21.1 *
G3M-92-01X	10.6	
WWTMW-14	32.0	
27M-92-04X	41.7	
12M-92-01X	47.0	
13M-92-01X	78.5 **	

* Method Detection Limit

** Likely Statistical Outlier

APPENDIX H

ECOLOGICAL DATA TABLES, INFORMATION, AND REFERENCES

TERRESTRIAL FOOD WEB MODEL

No state or federal standards or guidelines exist for surface soil exposure, so it has been evaluated through comparison of maximum analyte concentrations in surface soils to protective contaminant levels (PCLs) obtained through a computer-generated chronic exposure food web model. In order to establish conservative PCLs for the screening level PREs, an acceptable level of risk (Hazard Index [HI] equals 1) associated with chronic exposure to each surface soil contaminant isolated at Fort Devens was established.

The terrestrial food web model was developed to estimate the potential dietary exposure levels of contaminants for several potential receptor species representing various trophic levels within the ecological community at Fort Devens. Indicator receptor species were chosen to represent various taxonomic groups and trophic levels. It was assumed that each species evaluated is representative of other species within a given trophic level at Fort Devens (i.e., a trophic guilding approach was employed).

The following six indicator species were selected to represent exposure to terrestrial organisms via ingestion of food and surface soil at Fort Devens:

- Short-tailed Shrew (*Blarina brevicauda*). This carnivorous small mammal has a limited home range, a small body size, and a voracious appetite (Godin, 1977), factors which increase the likelihood that these organisms will encounter significant environmental contaminant concentrations. Short-tailed shrews frequent woody regions with moist, loose humus, and can be found in marshes and meadows. The short-tailed shrew tends to avoid dry sites, and is active both day and night.
- White-footed mouse (*Peromyscus leucopus*). The white-footed mouse occupies a small home range of up to 0.5 acre in grassy fields. Though occupying a similar niche as the carnivorous short-tailed shrew, the white-footed mouse was chosen as an indicator species because it is primarily herbivorous, and is found in a variety of habitats, including deciduous, mixed, and carnivorous forests, clearings, pastures, streamside thickets, and around buildings (DeGraff and Rudis, 1983).

- American Robin (*Turdus migratorius*). This abundant passerine songbird occurs throughout open woodlands, forest edges, clearings, fields, and grassy areas. Robins forage on earthworms and insects, and may include fruits in their diet (DeGraaf and Rudis, 1983). They are frequently encountered in developed regions.
- Garter Snake (*Thamnophis sirtalis*). The garter snake was chosen to be representative of the reptile community at Fort Devens. This carnivorous snake feeds on small mammals and invertebrates, and has a home range of approximately 5 acres. Garter snakes occur in a variety of habitats, but are most common in the vicinity of wetlands.
- Red fox (*Vulpes vulpes*). This omnivorous mammal prefers open woodlands and grassy fields, and is most active in the night, and at dawn and dusk. It is an opportunistic predator, feeding on small mammals, birds, reptiles, amphibians, and invertebrates, as well as berries and other fruits (Burt and Grossenheider, 1976). The red fox has a home range of approximately 250 acres.
- Red-tailed Hawk (*Buteo jamaicensis*). This bird of prey prefers foraging in open country, frequently on woodland edges. It feeds primarily on small mammals, although invertebrates, reptiles, and small birds are also included in its diet.

Detailed information for each of the above species regarding diet, home-range, and other biological exposure parameters used in the food-web model are provided in Table H-1.

The food-web model was used to estimate contaminant levels in various primary prey items (e.g., invertebrates and plants) consumed by each receptor species. Estimated contaminant tissue residues in each prey species were estimated using specific bioaccumulation factors (BAFs) obtained directly or extrapolated from values in the scientific literature, as shown in the following equation:

$$\text{Prey Tissue Concentration (mg/kg)} = \text{Soil Concentration (mg/kg)} \times \text{Bioaccumulation Factor (BAF)}$$

Other BAFs were used to estimate tissue concentrations in secondary prey items such as small birds, rodents, and reptiles. Chemical-specific BAF values used in the food-web model are provided in Table H-2.

The potential dietary exposure (PDE) level, for each modeled receptor species, was calculated by multiplying each predicted prey species tissue concentration by the proportion of that prey type in the diet, summing these values, adding soil exposure, and multiplying by the Site Foraging Frequency (SFF) of the given receptor species. Incidental soil ingestion associated with foraging, preening, and cleaning activities, was conservatively assumed to represent five percent of total dietary intake. The PDE is represented by the following equation:

$$PDE = \sum_{1 \rightarrow n} [P_1 \times T_1 + P_2 \times T_2 + \dots P_n \times T_n + \text{soil exposure}] \times SFF$$

where:

PDE	= Potential dietary exposure (mg/kg)
P_n	= Percent of diet composed of prey item n
T_n	= Tissue concentration in prey item n (mg/kg); calculated by multiplying the chemical concentration in soil by a bioaccumulation factor
Soil Exposure	= (0.05)(Soil concentration in mg/kg)
SFF	= Site Foraging Frequency; Area of Contaminated Soil (acres)/Home range (acres)

Finally, the potential dietary exposure for each receptor species was multiplied by the receptor-specific ingestion rate and divided by the estimated body weight to calculate a Total Body Dose (TBD):

$$TBD = PDE \times IR \times \frac{1}{BW}$$

where:

TBD	= Total Body Dose (mg/kgBW-day)
PDE	= Potential dietary exposure (mg/kg)
IR	= Ingestion rate (kg/day)
BW	= Body weight (kg)

Because the TBD estimates are normalized to the ingestion and body weight of the particular receptor being evaluated, they are directly comparable to estimated RTV values derived from the literature. The comparison of the TBD estimate with the appropriate RTV results in an index (the Hazard Index) of potential impact associated with exposure to that particular chemical.

Toxicity data evaluated for terrestrial receptors consists of acute and chronic oral ingestion studies which were preferentially chosen in the following order: 1) feeding studies, 2) gavage studies, 3) drinking water studies. Based on these data, RTVs were developed to represent a threshold concentration for effects to terrestrial organisms. RTVs are expressed in mg/kg BW (body weight)/day (dose normalized to body weight). From the toxicological data set (Table H-3), compound-specific chronic toxicity values for each type of receptor (indicator species) were selected as the Fort Devens RTV. These RTV values are presented in Table H-4.

The RTV selection procedure included the following general guidelines:

- Taxon-specific toxicological data were used whenever possible, regardless of study status (acute vs chronic, etc). When taxon-specific data were unavailable, available toxicological data were applied to the indicator species. Because reptile toxicological data are scarce, bird toxicity values were used to represent garter snake RTVs.
- Chronic RTVs are based on the average of reported Lowest Observed Adverse Effect Levels (LOAEL) for non-mortality endpoints from chronic studies (those lasting >364 days). However, when chronic non-mortality data were unavailable, the average of reported LOAEL non-mortality data from sub-chronic studies (those lasting 15-364 days) were used for the RTV. Mortality data from chronic studies were used only when data from chronic or sub-chronic non-mortality studies were unavailable. LOAELs extrapolated from acute or No Observable Adverse Effect Levels (NOAEL) were not included when LOAELs were averaged to derive RTVs.
- When chronic or sub-chronic studies were not available, acute study values were used. In these cases, two factors are applied to the acute Lethal Dose Fifty (LD_{50}) (the single dose lethal to 50 percent of the test organisms). These include: (1) a factor of 0.2 for extrapolating from the

oral LD₅₀ to a value expected to protect 99.9 percent of the population from acute effects (USEPA, 1986); and (2) a factor of 0.1 for extrapolating from acute to chronic values (the acute-chronic ratio for many chemicals is approximately 10 (Newell et al., 1987)). Additionally, in cases where only a NOAEL value was available, a factor of 5 was used to extrapolate the NOAEL to a LOAEL value. LOAELs extrapolated from chronic or sub-chronic NOAEL data were preferentially used over data extrapolated from acute studies.

- When no studies were available in the ABB-ES data base for a given contaminant, the contaminant was assigned an appropriate surrogate chemical for which adequate toxicological data exists (i.e., benzo(a)pyrene was used as a surrogate for dibenzo(a,h)anthracene).

Development of Protective Contaminant Levels (PCLs)

In order to develop PCLs for terrestrial receptors, an acceptable level of risk associated with exposure to each contaminant (Hazard Index [HI] = 1) was multiplied by the particular contaminant-specific RTV to estimate a Target Intake Dosage (TID), expressed as mg/kgBW-day, as shown by the following equation:

$$TR \times RTV = TID$$

TR	=	Target risk (HI = 1.0)
RTV	=	Reference toxicity value (mg/kgBW-day)
TID	=	Total target intake dosage (mg/kgBW-day)

The TID was multiplied by the Dietary Contribution Factor (DCF) (the inverse of the equation used to derive TBD) to estimate the PCL of the particular contaminant, as shown by the following equation:

$$\text{TID} * \text{DCF} = \text{PCL}$$

TID = Total target intake dosage (mg/kgBW-day)
DCF = Dietary Contribution Factor (kgBW-day/mg)
PCL = Protective Contaminant Level (mg/kg)

The lowest resultant PCLs were selected as the PCL values for use in these PREs; these PCLs are presented in Table 3-6 (in report text). In general, the short-tailed shrew (due to its small home range, voracious appetite, and insectivorous diet) is the ecological receptor species with the lowest PCL. These PCL values represent the concentration of each analyte in surface soil that, if not exceeded, is protective of all terrestrial organisms, including the short-tailed shrew. Because suitable habitat for the shrew does not exist at several Groups 3, 5, and 6 SAs, additional detail regarding the use of alternative PCLs is presented in the individual PREs.

Because of the numerous conservative assumptions included in the chronic exposure risk assessment model, the lowest PCL for four inorganic analytes (aluminum, barium, lead, and vanadium) is below the background concentrations established for Fort Devens. For these four analytes, the background concentration (rather than the PCL generated through the food web model) was used as the screening tool for evaluating surface soil at the Groups 3, 5, and 6 sites.

Exposure and toxicity values used to calculate PCLs at SA 21 have been updated (to reduce uncertainties) according to recently published literature, as part of the Phase III SI. Exposure parameters for terrestrial wildlife receptors were obtained primarily from the Exposure Factors Handbook (USEPA, December 1993), and are presented in Table H-5. BAFs were obtained from a number of sources, thereby eliminating numerous conservative assumptions that receptors bioaccumulate inorganic analytes by a factor of 1; updated BAFs are presented in Table H-6. The toxicity database used for estimating effects to receptors are presented in Table H-7, and a summary of the RTVs used to calculate PCLs are presented in Table H-8. A summary of the PCLs calculated using the updated exposure and toxicity data according to the methodology listed above are presented in Table H-9.

PRE GENERAL ASSUMPTIONS AND UNCERTAINTIES

ASSUMPTIONS AND UNCERTAINTIES

General assumptions and uncertainties for the Fort Devens PREs include, but are not limited to, the following:

1. The human health standards and guidelines used in these PREs are based on standard USEPA exposure assumptions. Quantitative human health risk assessments based on SA-specific characteristics and exposure potential have not been conducted.
2. The USEPA Region III Risk-Based Concentrations are readily available screening values used in the human health PREs. They do not represent target cleanup levels. Because they are based on standard USEPA risk assessment assumptions and methodology, the risk-based concentrations are considered to be reasonable screening values.
3. The food web models used to estimate surface soil protective concentrations involve numerous exposure parameters, some of which are values from the literature, and some of which are assumed or estimated. Efforts were made to select exposure parameters representative of a variety of species or feeding guilds, so that exposure estimates would be representative of more than a single species. However, numerous extrapolations relating measurement and assessment endpoints have been included in these PREs. These include extrapolations between taxa, between responses, and from laboratory to field studies.
4. The exposure models from which protective surface soil levels were derived assume that organisms will spend equal amounts of time in all habitats within their home ranges. In actuality, organisms will spend varying amounts of time in different habitats which would affect their exposures. The limitation of this assumption is that exposures to the particular species modeled may be over-estimated or under-estimated in these PREs.
5. Information regarding the presence or absence of ecological receptors at the site was obtained from a review of literature, habitat characteristics, and short-term field studies. Actual occurrence and/or utilization of the site by many ecological receptors is uncertain.

6. Neither dermal contact nor inhalation were evaluated in the protective surface soil food web model because of a lack of information concerning uptake rates for wildlife. Therefore, total ecological exposure may be greater than predicted based solely on modeled ingestion scenarios. However, the relative contribution of dermal contact to total ecological risk is expected to be much lower than that of food and sediment ingestion, because of the protective fur, feathers, or hardened skin covering most species of semi-terrestrial wildlife.
7. The PREs evaluate potential ecological effects to individual organisms, and do not evaluate potential population-level risks. In many circumstances, acute or chronic effects may occur to individual organisms with little potential population or community level effects; however, as the number of individual organisms experiencing toxic effects increases, the probability that population-level effects will occur also increases. As a result of this assumption, the calculated protective concentrations may be overly protective of true community or population level effects.
8. An assumption has been made that all analytes in the Fort Devens surface soil and surface water are bioavailable, and that all inorganics in sediments are bioavailable. In actuality, it is likely that only a portion of these analytes are bioavailable; therefore, these PREs may over-estimate risk.
9. The PCLs developed through the back-calculated food web model represent a screening tool to determine whether or not an analyte may present risk to ecological receptors. These PCLs do not represent target cleanup levels.

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TABLE H-1
ECOLOGICAL EXPOSURE PARAMETERS

SITE INVESTIGATION REPORT
FORT DEVENS

RECEPTOR SPECIES	EXPOSURE PARAMETER	REPORTED VALUES	REFERENCE	VALUE SELECTED FOR PRE
White-footed Mouse (<i>Peromyscus leucopus</i>)	Home Range (acres)	0.16-0.54 acres	DeGraaf and Rudis, 1986	0.3 Ac [a]
	Percent Prey Items	Acorns, blueberry, knotweed, pine, maple, tubers. Insects, snails, small birds	Martin et al., 1951	Invertebrates: 10% Plants: 85% Soil: 5%
	Ingestion Rate (kg/day)	0.00375 kg/day (measured in laboratory)	USEPA, 1988	0.00375 kg/day [b]
	Body Weight (kg)	0.015 - 0.03 kg	Baker, 1983 Godin, 1977	0.025 kg
	Drinking water Intake Rate (l/day)	0.0355 L/day (measured in laboratory)	USEPA, 1988	0.0355 L/day

NOTES:

[a] Selected as conservative value; actual range may greater

TABLE H-1 (continued)
ECOLOGICAL EXPOSURE PARAMETERS

SITE INVESTIGATION REPORT
FORT DEVENS

RECEPTOR SPECIES	EXPOSURE PARAMETER	REPORTED VALUES	REFERENCE	VALUE SELECTED FOR PRE																		
American Robin (<i>Turdus migratorius</i>)	Home Range (acres)	Territory sizes of: 0.3 – 0.75 Ac; 0.11 – 0.6 Ac; Avg. of 0.30 Ac	DeGraaf and Rudis, 1986	0.30 Ac																		
	Percent Prey Items	Fruits, earthworms, insects; diet is approximately 60% plant material. Caterpillars, beetles, earthworms, true bugs, flies, sowbugs, snails, spiders, termites, millipedes, centipedes, fruits, various plants. The percentage of plant material in diet varies seasonally as shown below:	DeGraaf and Rudis, 1986 Martin et al., 1951	Invertebrates: 40% Plants: 55% Soil: 5%																		
		<table><tr><th>Season</th><th>No. Month</th><th>Percent</th></tr><tr><td>Winter</td><td>5</td><td>64%</td></tr><tr><td>Spring</td><td>2</td><td>21%</td></tr><tr><td>Summer</td><td>3</td><td>60%</td></tr><tr><td>Fall</td><td>2</td><td>81%</td></tr><tr><td>Estimated Year—round Average</td><td></td><td>59%</td></tr></table>	Season	No. Month	Percent	Winter	5	64%	Spring	2	21%	Summer	3	60%	Fall	2	81%	Estimated Year—round Average		59%		
	Season	No. Month	Percent																			
	Winter	5	64%																			
	Spring	2	21%																			
Summer	3	60%																				
Fall	2	81%																				
Estimated Year—round Average		59%																				
Ingestion Rate (kg/day)	Allometric relationship between body weight (W) and food ingestion rate (F) for chickens: F = 0.075 x W ^{0.8449}	USEPA, 1988	0.0084 kg/day																			
Body Weight (kg)	0.0648 – 0.0842 kg	Terres, 1987	0.0745 kg [a]																			
Drinking Water Intake Rate (l/day)	Allometric relationship between body weight (W) and drinking water rate (L) for chickens: L = 0.13 x W ^{0.7555}	USEPA, 1988	0.018 l/day																			

NOTES:

[a] Average of reported values

TABLE H-1 (continued)
ECOLOGICAL EXPOSURE PARAMETERS

SITE INVESTIGATION REPORT
FORT DEVENS

RECEPTOR SPECIES	EXPOSURE PARAMETER	REPORTED VALUES	REFERENCE	VALUE SELECTED FOR PRE
Eastern garter snake (<i>Thamnophis sirtalis</i>)	Home Range (acres)	5, 2, 35 (males), 22.2 (females)	DeGraaf and Rudis, 1986	5 [a]
	Percent Prey Items	Earthworms are 80% of diet; rest is amphibians, carrion, fish, leeches, caterpillars, insects, small birds, rodents, slugs, snakes, mollusks, crayfish, and sowbugs	DeGraaf and Rudis, 1986	Invertebrates: 85% Small Mammals: 5% Birds: 5% Soil: 5%
	Ingestion Rate (kg/day)	Allometric relationship between body weight (W) and food ingestion rate (F) for all species: $F = 0.065 \times W^{0.7919}$		0.023 kg/day
	Body Weight (kg)			0.27 kg [b]
	Drinking Water Intake Rate (l/day)	Allometric relationship between body weight (W) and drinking water rate (L) for all species: $L = 0.11 \times W^{0.7872}$		0.039 l/day

NOTES:

[a] Selected as conservative value; actual range may be greater.

[b] Estimated assuming the density of water (1 gm/cu.cm), an average length of 55 cm (Conant, 1975), and an assumed diameter of 2.5 cm.

TABLE H-1 (continued)
ECOLOGICAL EXPOSURE PARAMETERS

SITE INVESTIGATION REPORT
FORT DEVENS

RECEPTOR SPECIES	EXPOSURE PARAMETER	REPORTED VALUES	REFERENCE	VALUE SELECTED FOR PRE																		
Red Fox (<i>Vulpes vulpes</i>)	Home Range (acres)	< 3 miles in diameter; 142 – 400 Ac	DeGraaf and Rudis, 1986	250 [a]																		
		< 5 miles in diam.	Godin, 1977																			
		142 to 1280; 900; 1495; 955 acres	Baker, 1983																			
	Percent Prey Items	Birds, turtles, frogs, snakes, eggs, snowshoe hare, deer, porcupine, and berries and fruit when available	DeGraaf and Rudis, 1986	Invertebrates: 20% Plants: 10% Small Mammals: 40% Herpetofauna: 15% Birds: 10% Soil: 5%																		
		Small mammals, birds and their eggs, insects, earthworms, turtles and their eggs, frogs, snakes, wild berries, sarsaparilla, grapes, plums, and apples. Infrequently eats nuts and grains, and sometimes ingests rope, twine, paper, sticks, and trash.	Godin, 1977																			
		Mice, rabbits, other small mammals and birds, insects, carrion, fleshy fruits, and seeds. The percentage of plant material in diet varies seasonally as shown below:	Martin, et al., 1951																			
		<table><tr><th>Season</th><th>No. Month</th><th>Percent</th></tr><tr><td>Winter</td><td>5</td><td>4%</td></tr><tr><td>Spring</td><td>2</td><td>0%</td></tr><tr><td>Summer</td><td>3</td><td>31%</td></tr><tr><td>Fall</td><td>2</td><td>23%</td></tr><tr><td>Estimated Year—round Average</td><td></td><td>13%</td></tr></table>	Season	No. Month	Percent	Winter	5	4%	Spring	2	0%	Summer	3	31%	Fall	2	23%	Estimated Year—round Average		13%		
	Season	No. Month	Percent																			
	Winter	5	4%																			
	Spring	2	0%																			
Summer	3	31%																				
Fall	2	23%																				
Estimated Year—round Average		13%																				
Ingestion Rate (kg/day)	Allometric relationship between body weight (W) and food ingestion rate (F) for all species: $F = 0.065 \times W^{0.7919}$			0.23 kg/day																		
Body Weight (kg)	3.6 to 5.4 kg			4.9 [b]																		
	3.6 to 6.8 kg																					
Drinking Water Intake Rate (l/day)	Allometric relationship between body weight (W) and drinking water intake rate (L) for all species: $L = 0.11 \times W^{0.7872}$			0.38 l/day																		

NOTES:

[a] Selected as conservative value; actual range may be much greater

[b] Average of reported values

TABLE H-1 (continued)
ECOLOGICAL EXPOSURE PARAMETERS

SITE INVESTIGATION REPORT
FORT DEVENS

RECEPTOR SPECIES	EXPOSURE PARAMETER	REPORTED VALUES	REFERENCE	VALUE SELECTED FOR PRE
Short-tailed Shrew (Blarina brevicauda)	Home Range (acres)	2.88, 1, 0.21, 1.46, 1.39, 0.25, 4.43 1, 1.25, 0.5, 1 0.5	Baker, 1983 DeGraaf and Rudis, 1986 Burt, 1987	2 [a]
	Percent Prey Items	Insects, invertebrates, small vertebrates, worms	Baker, 1983	Invertebrates: 85% Plants: 10% Soil: 5%
		Insects, plants, worms, sowbugs, snails, small vertebrates, centipedes, millipedes, spiders	DeGraaf and Rudis, 1986	
	Ingestion Rate (kg/day)	Insects, earthworms, vertebrates, invertebrates, occasionally plants 50% to 300% of its body weight/day	Godin, 1977 Baker, 1983	0.021 kg/day (100% of BW/day)
	Body Weight (kg)	0.018 to 0.030 kg 0.013 to 0.024 kg	Baker, 1983 Godin, 1977	0.021 kg [a]
	Drinking Water Intake Rate (l/day)	Allometric relationship between body weight (W) and drinking water rate (L) for mammals: $L = 0.10 \times W^{0.7377}$	USEPA, 1988	0.0058 l/day

NOTES:

[a] Average of reported values

TABLE H-1 (continued)
ECOLOGICAL EXPOSURE PARAMETERS

SITE INVESTIGATION REPORT
FORT DEVENS

RECEPTOR SPECIES	EXPOSURE PARAMETER	REPORTED VALUES	REFERENCE	VALUE SELECTED FOR PRE
Red-tailed hawk (<i>Buteo jamaicensis</i>)	Home Range (acres)	Breeding: 192 - 1376 acres Winter: up to 2560 acres	DeGraaf and Rudis, 1986	500 [a]
	Percent Prey Items	Small mammals, amphibians, reptiles, nesting birds, insects, carrion, domestic animals	DeGraaf and Rudis, 1986	Small mammals: 55% Invertebrates: 5% Plants: 5% Birds: 20% Herpetofauna: 10%
	Ingestion Rate (kg/day)		Terres, 1987	0.23 kg/day [b]
	Body Weight (kg)	1.5 kg	Terres, 1987	1.5
	Drinking Water Intake Rate (l/day)	Allometric relationship (all species) $L = 0.11 * W^{0.7872}$ $W = \text{Weight} = 1.50 \text{ kg.}$	EPA, 1988	0.151 l/day
	Density (#/acre)	0.0014 (1 pair/2.2 square miles) 0.00076 (1 pair/4.1 square miles) 0.00625 (1 pair/0.5 square miles)	DeGraaf and Rudis, 1986	0.0028 [c]
	Lifespan (years)	4 years	Terres, 1987	4

NOTES:

[a] Selected as conservative value; actual range may be much greater

[b] Ingestion rate based upon ratio of ingestion rate to body weight for golden eagle (Terres, 1987), using 1.5 kg body weight for hawk

[c] Average of reported values

TABLE H-2
SUMMARY OF BIOACCUMULATION FACTORS

SITE INVESTIGATION REPORT
FORT DEVENS

CHEMICAL	LOG K _{ow}	BIOACCUMULATION FACTORS (BAFs) [a]				
		PLANT [b]	INVERTE- BRATES	SMALL MAMMAL	SMALL BIRD	REPTILE
VOLATILE ORGANICS						
Tetrachloroethene	2.6 [c]	1.000	1	1	1	1
Toluene	2.69 [d]	1.000	1	1	1	1
Trichlorofluoromethane	2.53 [c]	1.000	1	1	1	1
Xylenes	3.04 [e]	0.677	1	1	1	1
SEMI-VOLATILE ORGANICS						
Acenaphthene	4.33 [d]	0.122	1	1	1	1
Acenaphthylene	4.07 [d]	0.172	1	1	1	1
Anthracene	4.45 [d]	0.104	1	1	1	1
Benzo(a)anthracene	5.6 [d]	0.022	1	1	1	1
Benzo(a)pyrene	6.04 [f]	0.012	1	1	1	1
Benzo(b)fluoranthene	6.06 [c]	0.012	1	1	1	1
Benzo(g,h,i)perylene	7.23 [f]	0.003	1	1	1	1
Benzo(k)fluoranthene	6.06 [c]	0.012	1	1	1	1
bis(2-ethylhexyl)phthalate	5.3 [d]	0.033	1	1	1	1
Carbazole	3.72	0.274	1	1	1	1
Chrysene	5.61 [d]	0.022	1	1	1	1
Dibenz(a,h)anthracene	6.8 [c]	0.005	1	1	1	1
Dibenzofuran	3.12 [c]	0.609	1	1	1	1
Fluoranthene	5.33 [d]	0.032	1	1	1	1
Fluorene	4.18 [g]	0.149	1	1	1	1
Indeno(1,2,3-cd)pyrene	6.49 [c]	0.007	1	1	1	1
Naphthalene	3.44 [c]	0.398	1	1	1	1
Phenanthrene	4.46 [d]	0.102	1	1	1	1
Pyrene	4.88 [g]	0.059	1	1	1	1
INORGANIC COMPOUNDS						
Aluminum	--	1	1	1	1	1
Antimony	--	1	1	1	1	1
Arsenic	--	0.2 [h]	1	0.37 [i]	0.56 [j]	1
Barium	--	1	1	1	1	1
Beryllium	--	1	1	1	1	1
Cadmium	--	15 [k]	17 [l]	2.61 [l]	10 [k]	10 [k]
Chromium	--	0.1 [m]	0.16	1	1	1
Cobalt	--	1	1	1	1	1
Copper	--	10 [k]	9.25 [l]	1	1	1
Lead	--	0.2 [n]	2.43 [l]	0.43 [l]	0.38 [n]	1
Manganese	--	1	1	1	1	1
Mercury	--	1	0.34	5 [o]	2.33 [p]	10 [k]
Nickel	--	3.2 [q]	1.85 [l]	0.12 [q]	1	1
Selenium	--	1	1	1	1	1
Silver	--	1	1	1	1	1
Vanadium	--	1	1	1	1	1
Zinc	--	10 [k]	7.31 [l]	5.11 [l]	10 [k]	10 [k]

TABLE H-2 (continued)
SUMMARY OF BIOACCUMULATION FACTORS

SITE INVESTIGATION REPORT
FORT DEVENS

NOTES:

[a] Bio-accumulation Factors (BAFs) were conservatively estimated to be 1 when empirical data were unavailable.

Plant BAFs were set equal to 1 when equation presented in [c] exceeded 1.

[b] Calculated using the following equation in USEPA (1990) unless otherwise indicated:

$$\log(\text{Plant Uptake Factor}) = 1.588 - 0.578 \log K_{ow}$$

[c] Value from USEPA (1990).

[d] From USEPA (1985).

[e] From Verschueren (1983).

[f] From Eisler (1987).

[g] Value from Hansch and Leo (1979).

[h] Plant value from Eisler (1988).

[i] Mammal value from USEPA (1985).

[j] Bird value from USEPA (1985)

[k] Conservative BAF estimation in excess of 1.

[l] Values for earthworms and small mammals from McFadyen (1980).

[m] Plant value from USEPA (1985).

[n] Earthworm and chicken value from USEPA (1985).

[o] Mammal value from USEPA (1985).

[p] Invertebrate, mammal, and bird value from USEPA (1985)

[q] Plant and small mammal value from USEPA (1985).

TABLE H-3
SUMMARY OF INGESTION TOXICITY DATA FOR TERRESTRIAL WILDLIFE (REFERENCE TOXICITY VALUES)
SITE INVESTIGATION REPORT
PORT DEVENS

CHEMICAL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	ACUTE*			CHRONIC*					
					ORAL LD50 (mg/kg BW)	RISK CRITERIA (mg/kg BW)	LOAEL (mg/kg BW/day)	NOAEL (mg/kg BW/day)	REFERENCE				
VOLATILE ORGANICS													
Tetrachloroethene	Mouse	Single oral dose	6 weeks	Mortality	8100	1620 [a]	71	14		TDB, 1984			
	Mouse	Oral (subchronic)		Hepatotoxicity						IRIS, 1991			
Toluene	Rat	Single oral dose		Mortality	8850	1770 [a]				446	223		NIOSH, 1985
	Rat	Single oral dose		Mortality	5000	1000 [a]							NIOSH, 1985
	Rat	Oral (subchronic)	Liver and kidney weight changes		4460 [b]	IRIS, 1991							
Trichlorofluoromethane	Rat	Oral (subchronic)	13 weeks	NOAEL for hepatic, renal, and hematological alterations			2950 [d]	590	ATSDR, 1989				
	Rat	Oral (subchronic)	6 months	NOAEL for CNS effects			98.5 [d]	19.7	ATSDR, 1989				
	Rat	Oral (chronic)	42 days	Mortality		4880 [b]	488		IRIS, 1991				
	Xylenes	Rat	Single oral dose	78 weeks	Mortality	4300	860 [a]			NIOSH, 1985			
Japanese quail	Rat	Oral (chronic)	103 weeks	Hyperactivity, decreased BW, mortality			> 500	250	IRIS, 1991				
		Oral (acute)	5 weeks	Mortality	20000	2014 [c]	201 [b]		Hill and Camardese, 1986				
	SEMI-VOLATILE ORGANICS												
Acenaphthene	Rat	Oral (sic)	90 days	Hepatotoxicity		3500 [b]	350	175	IRIS, 1990				
Acenaphthylene	Mouse	Oral (sic)	32 days	Physiological changes		20000 [b]	2000		USEPA, 1984				
	Rat	Oral (subchronic)	40 days	Physiological changes		6000 [b]	600		USEPA, 1984				
	Rodents	Oral (chronic)	NS	Carcinogenicity		33000 [b]	3300		Eisler, 1987				
	Anthracene	Mouse	Oral (subchronic)	90 days	No effects				1000	IRIS, 1990			
Benzo(a)anthracene	Rodents	Oral (chronic)	NS	Carcinogenicity		20 [b]	2		Eisler, 1987				
Benzo(a)pyrene	Rat	Oral (chronic)	Pregnancy	Sterility in offspring			40		USEPA, 1984				
(Surrogate for	Rodents	Oral (chronic)	NS	Carcinogenicity		0.02 [b]	0.002		Eisler, 1987				
Dibenz(a,h)anthracene	Rat	Oral (chronic)	NS	Papillomas in stomach			2.5		USEPA, 1985				
	Rat	Oral (chronic)	Pregnancy	Decreased gonad weight			10		USEPA, 1984				
	Rat	Oral (subchronic)	3.5 months	Reproductive effects			50		USEPA, 1984				
		Single oral dose		Mortality	50	10 [a]	1 [b]		Eisler, 1987				
Benzo(b)fluoranthene	Rodents	Oral (chronic)	NS	Carcinogenicity		400 [b]	40		Eisler, 1987				
Benzo(k)fluoranthene	Rodents	Oral (chronic)	NS	Carcinogenicity		720 [b]	72		Eisler, 1987				
Benzofuran (surrogate for dibenzofuran)	Rodents	Oral (subchronic)	13 weeks	Decrease in body weight			2.4 [c]		NTP, 1989				
	Rodents	Oral (chronic)	2 years	Mortality		6 [b]	0.6 [c]		NTP, 1989				
		Single oral dose		Mortality	8600	1720 [a]	172 [b]		NIOSH, 1985				
	Bis(2-ethylhexyl)phthalate	Guinea pig	Oral (chronic)	1 year	Increased liver weight			19		IRIS, 1992			
Carbazole	Rat	Single oral dose		Mortality	26000	5200 [a]	520 [b]		ATSDR, 1988				
		Single oral dose		Mortality	500	100 [a]	10 [b]		USEPA, 1986				
		Single oral dose		Mortality									

TABLE H-3 (continued)
SUMMARY OF INGESTION TOXICITY DATA FOR TERRESTRIAL WILDLIFE (REFERENCE TOXICITY VALUES)
SITE INVESTIGATION REPORT
PORT DEVENS

CHEMICAL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	ACUTE*		CHRONIC*		REFERENCE
					ORAL LD50 (mg/kg BW)	ACUTE ORAL RISK CRITERIA (mg/kg BW)	LOAEL (mg/kg BW/day)	NOAEL (mg/kg BW/day)	
Chrysene (surrogate for benzo[a,h,i]perylene)	Rodents	Oral (chronic)	NS	Carcinogenicity		990 [b]	99 [f]		Eisler, 1987
Fluoranthene	Rodents	Single oral dose		Mortality	2000	400 [a]	40 [b]		Eisler, 1987
Fluorene	Mouse	Oral (subchronic)	90 days	Liver weight/physiological changes			250	125	IRIS, 1990
Indeno[1,2,3-cd]pyrene	Mouse	Oral (subchronic)	13 weeks	Hematological changes		2500 [b]	250	125	IRIS, 1990
Naphthalene	Rodents	Oral (chronic)	NS	Carcinogenicity		720 [b]	72		Eisler, 1987
	Mouse	Single oral dose		Mortality	533	110 [a]			ATSDR, 1990
	Rat	Oral (subchronic)	13 weeks	Decreased body weight gain			35.7		USEPA, 1990
	Rat	Oral (chronic)	100 weeks	Ocular lesions			41		USEPA, 1990
Phenanthrene	Rat	Oral (chronic)	700 days	NOAEL for death	700	140 [a]	205 [d]	41	ATSDR, 1990
	Rodents	Single oral dose		Mortality			14 [b]		Eisler, 1987
Pyrene	Rat	Oral (subchronic)	6 months	Increased liver weight			120		ATSDR, 1990
	Mouse	Single oral dose		Mortality	800	160 [a]			NIOSH, 1985
	Mouse	Oral (subchronic)	13 weeks	Renal effects			125	75	IRIS, 1990
	Rat	Single oral dose		Mortality	2700	540 [a]			NIOSH, 1985
INORGANICS									
Aluminum	Mouse	Oral (chronic)	2-3 genrtns	Reduced body weight gain of newborns			425		NIOSH, 1985
	Rat	Oral (subchronic)	15 days	Reduced growth		1000 [b]	100		Bernuzzi, et al., 1989
Antimony	Mouse	Oral (chronic)	504-909 days	NOAEL			1.75 [d]	0.35	ATSDR, 1989
Arsenic	Rat	Oral (chronic)	NS	Weight loss		75 [b]	7.5		USEPA, 1984
	Rat	Oral (subchronic)	90 days	No hematological, hepatic and renal effects			28.5 [d]	5.7	ATSDR, 1989
	Mallard	Single oral dose		Mortality	323	64.6 [a]	6.5 [b]		Eisler, 1988
California quail		Single oral dose		Mortality	47.6	9.5 [a]	1.0 [b]		Eisler, 1988
Pheasant		Single oral dose		Mortality	386	77.2 [a]	7.7 [b]		Eisler, 1988
Dog		Oral (chronic)	NS	Mortality		2500 [b]	250 [d]	50	USEPA, 1984
Mouse		Oral (chronic)	lifetime	NOEL			4.13 [d]	0.825	IRIS, 1990
Rat		Oral (chronic)	16 months	NOEL			25.5 [d]	5.1	IRIS, 1990
Rat		Oral (chronic)	lifetime	NOEL			1 [d]	0.25	IRIS, 1990
Rat		Oral (subchronic)	13 weeks	NOEL			157.5 [d]	31.5	IRIS, 1990
Beryllium	Rat	Single oral dose		Mortality	10	2.0 [a]			USEPA, 1985
	Rat	Oral (chronic)	3.2 years	No respiratory, hepatic, renal, or cardiovascular effects			4.25 [d]	0.85	ATSDR, 1989
	Rat	Oral (chronic)	NS	Increase in lung sarcomas			0.22		USEPA, 1985
Cadmium	Mouse	Oral (chronic)	18 months	Histopathological effects		18 [b]	1.75		ATSDR, 1988
	Mouse	Oral (subchronic)	28 days	Alteration in blood chemistry			0.32		Eisler, 1985
	Mouse (young)	Oral (subchronic)	28 days	Blood chemistry altered				1.8	Eisler, 1985

TABLE H-3 (continued)
SUMMARY OF INGESTION TOXICITY DATA FOR TERRESTRIAL WILDLIFE (REFERENCE TOXICITY VALUES)

SITE INVESTIGATION REPORT
PORT DEVENS

CHEMICAL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	ACUTE*			CHRONIC*			REFERENCE
					ORAL LD50 (mg/kg BW)	RISK CRITERIA (mg/kg BW)	LOAEL (mg/kg BW/day)	NOAEL (mg/kg BW/day)			
Chromium (Cr+3)	Rat	Single oral dose		Mortality	250	50 [a]					Eiskr. 1985
	Rat	Single oral dose		Testicular damage				100			Eiskr. 1985
	Rat	Oral (subchronic)	12 weeks	Hepatic and Renal necrosis			14				ATSDR 1992
	Guinea pig	Single oral dose		Mortality	150	30 [a]	3 [b]				Eiskr. 1985
	Japanese quail	Oral (subchronic)	6 weeks	Bone marrow hypoplasia		76 [b]	7.6				Eiskr. 1985
	Mallard	Oral (subchronic)	90 days	Egg production suppressed		100 [b]	10 [d]				Eiskr. 1985
	Mallard	Oral (subchronic)	90 days	NOEL				200			Eiskr. 1985
	Dog	Oral (subchronic)	3 months	NOAEL			3.75 [d]	0.75			Eiskr. 1985
	Mallard (young)	Oral (subchronic)	12 weeks	Kidney lesions					20		Eiskr. 1985
	Mouse	Oral (subchronic)	13 weeks	Testicular degeneration		57 [b]	5.7				ATSDR 1991
(Cr+6) (Cr+6) (Potassium dichromate)	Mouse	Oral (subchronic)	19 days	Fetal resorptions, gross anomalies			57				ATSDR 1989
	Rat	Oral (subchronic)	28 days	Renal and neurological deficits			98				ATSDR 1989
	Rabbit	Oral (subchronic)	6 weeks	Liver and blood chemistry effects		17 [b]	1.7				Eiskr. 1986
	Chicken	Oral (subchronic)	32 days	Growth, survival				8			Eiskr. 1986
	Black duck	Oral (subchronic)	5 months	Growth patterns altered			3.5				Eiskr. 1986
	Japanese quail	Oral (acute)	5 days	Mortality	126 [c]	25 [a]	2.5 [b]				Hill and Camardese, 1986
	Rat	Single oral dose		Mortality	91	18 [a]	1.8 [b]				ATSDR 1991
	Rat	Single oral dose		Hepatic/renal hyperemia		157.3					ATSDR 1991
	Rat	Oral (subchronic)	8 weeks	Decreased bodyweight gain			4.2				ATSDR 1991
	Rat	Oral (acute)	1 week	Stunted growth during gestation			0.0 [b]				ATSDR 1991
Copper	Rat	Oral (subchronic)	98 days	Testicular degeneration			13.25				ATSDR 1991
	Rat	Oral (subchronic)	69 days	Testicular atrophy			20				ATSDR 1991
	Guinea pig	Oral (subchronic)	5 week	Mortality		20					ATSDR 1991
	Dog	Oral (subchronic)	4 weeks	Increased red blood cell count		50 [b]	5				ATSDR 1991
	Rat	Single oral dose		TDLo for reproductive effects		152	15.2 [b]				NIOSH 1985
	Rat	Oral (subchronic)	22 weeks	Fetotoxicity; CNS abnormalities			152				NIOSH 1985
	Rat	Oral (subchronic)	35 weeks	Pre-implantation mortality		12 [b]	1.21				NIOSH 1985
	Swine	Oral (subchronic)	9 months	Mortality			1.4				USEPA 1980
	Mallard	Oral (subchronic)	29 days	No effect on survivorship		2.09	0.2 [b]				Demayo et al., 1982
	Mallard	Oral (subchronic)	NS	LOAEL			29				NRC, 1977

TABLE H-3 (continued)
SUMMARY OF INGESTION TOXICITY DATA FOR TERRESTRIAL WILDLIFE (REFERENCE TOXICITY VALUES)
SITE INVESTIGATION REPORT
PORT DEVENS

CHEMICAL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	ACUTE*			CHRONIC*			REFERENCE
					ORAL LD50 (mg/kg BW)	RISK CRITERIA (mg/kg BW)	LOAEL (mg/kg BW/day)	NOAEL (mg/kg BW/day)			
Lead	Mouse	Oral (chronic)	NS	Reduced success of implanted ova					1.5		Eisler, 1988
	Rat	Single oral dose		Mortality	12	2 [a]					Eisler, 1988
	Rat	Single oral dose		LDLO	17	3 [a]					Eisler, 1988
	Rat	Oral (subchronic)	Days 12-14 (preg)	Increased fetal resorption rate; decreased fetal BW		2.5			0.3 [b]		McClain and Becker, 1972
	Rat	Oral (subchronic)	Days 5-15 (preg)	Increased resorptions/dam		1			0.1 [b]		Kennedy et al., 1975
	Rat	Oral (subchronic)	3 weeks	Increased locomotor activity		1.5 [c]			0.2 [b]		Eisler, 1988
	Rat	Oral (chronic)	2 years	Decreased ALAD synthesis					2.16 [c]		ATSDR, 1988
	Rat	Oral (subchronic)	3 weeks	Increased locomotor activity					25		Eisler, 1988
	Rabbit	Single oral dose		LDLO	24	5 [a]			0.5 [b]		ATSDR, 1988
	Rabbit	Oral (chronic)	NS	Mortality		5.1 [b]			0.51 [c]		USEPA, 1988
	Chicken	Oral (subchronic)	4 weeks	Growth rate suppressed					169 [c]		Eisler, 1988
	Ringed turtle-dose	Oral (acute)	NS	Some mortality; kidney damage							Eisler, 1988
	Mallard	Single oral dose		Mortality	75	15 [a]			2.1 [b]		Eisler, 1988
	Mallard	Oral (subchronic)	NS	Some mortality and ALAD decrease	107	21 [a]			3.0 [b]		Eisler, 1988
	Mallard	Oral (subchronic)	12 weeks	Decrease in ALAD activity	151	30 [a]			1.75 [c]		Eisler, 1988
	Japanese quail	Single oral dose		Mortality	24.6	4.9 [a]					Eisler, 1988
	Starling	Oral (acute)	11 days	Reduced food consumption					2.8		Eisler, 1988
	Kestrel (nestlings)	Oral (acute)	10 days	Abnormal development		125			12.5 [b]		Eisler, 1988
	Kestrel (nestlings)	Oral (acute)	10 days	ALAD depression		25			2.5 [b]		Eisler, 1988
Kestrel (nestlings)	Oral (acute)	10 days	Mortality and developmental effects		625			62.5 [b]		Eisler, 1988	
Kestrel	Oral (subchronic)	5 months	NOEL					4.45 [d]		Eisler, 1988	
Kestrel	Oral (subchronic)	5 months	Blood ALAD reduced 80%		44 [b]			4.4 [c]		Eisler, 1988	
Cattle (calves)	Oral (subchronic)	105 days	Mortality		60 [b]			6		Eisler, 1988	
Horse	Oral (chronic)	NS	Mortality					2.4		Eisler, 1988	
Dog	Oral (acute)	NS	LDLO		300			30 [b]		ATSDR, 1988	
Dog	Oral (subchronic)	180 days	Anorexia and convulsions		30 [b]			3		Eisler, 1988	
Mouse	Oral (subchronic)	6 months	Mortality							2300	ATSDR, 1990
Mouse	Oral (subchronic)	90 days	Delayed growth of testes					140		810	ATSDR, 1990
Mouse	Oral (chronic)	103 weeks	Mortality					4050 [d]			ATSDR, 1990
Rat	Single oral dose		Mortality	410							ATSDR, 1990
Rat	Oral (subchronic)	20 day	Mortality		45 [a]			4.5 [b]			ATSDR, 1990
Rat	Oral (subchronic)	10 weeks	Hepatic effects	225				60 [d]		12	ATSDR, 1990
Rat	Oral (subchronic)	20 days	Decreased litter weight during gestation							620	ATSDR, 1990
Rat	Oral (chronic)	103 weeks	Mortality		1240			930			ATSDR, 1990
Rat	Oral (subchronic)	2 months	Biochemical alterations in CNS					600			ATSDR, 1990

TABLE H-3 (continued)
SUMMARY OF INGESTION TOXICITY DATA FOR TERRESTRIAL WILDLIFE (REFERENCE TOXICITY VALUES)
SITE INVESTIGATION REPORT
PORT DEVENS

CHEMICAL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	ACUTE*			CHRONIC*		
					ORAL LD50 (mg/kg BW)	RISK CRITERIA (mg/kg BW)	LOAEL (mg/kg BW/day)	NOAEL (mg/kg BW/day)	REFERENCE	
Mercury	Guinea pig	Single oral dose		Mortality	400					USEPA, 1984
	Monkey	Oral (chronic)	18 months	Weakness, rigidity			25			ATSDR, 1990
	Mouse	Single oral dose		Mortality	22					NIOSH, 1985
	Mouse	Oral (subchronic)	18 days	Mortality; neurological symptoms			6.3			Suzuki, 1979
	Mouse	Oral (subchronic)	38 days	Mortality; neurological symptoms			5			Suzuki, 1979
	Mouse	Oral (subchronic)	50 days	Embryotoxicity and teratogenicity			0.9			Suzuki, 1979
	Mouse	Oral (subchronic)	45 days	Hypophagia, weight loss, weakness of hind legs			1			Suzuki, 1979
	Mouse	Oral (subchronic)	Day 6-17 (gest)	Stillbirths and neonatal death			4			Suzuki, 1979
	Mouse	Oral (subchronic)	Day 0-18 (gest)	Embryolethality and teratogenicity			0.7			Suzuki, 1979
	Rat	Oral (subchronic)	Day 6-14 (gest)	Retarded fetus growth and teratogenicity			4			Suzuki, 1979
	Rat	Oral (subchronic)	Gest. + 16 days	Behavioral changes in offspring			0.12 [c]			Suzuki, 1979
	Rat	Oral (chronic)	NS	Reduced fertility			0.5			Eisker, 1987
	Rat	Oral (subchronic)	38 days	Adverse behavioral change			0.16 [c]			Eisker, 1987
	Rat	Single oral dose		Mortality	18	3.6 [a]	0.36 [b]			NIOSH, 1985
	Pig	Oral (chronic)	Pregnancy	High incidence of stillbirths			0.5			Eisker, 1987
	House sparrow	Single oral dose		Mortality	12.6	2.5 [a]				Eisker, 1987
	Rock dove	Single oral dose		Mortality	22.8	4.6 [a]				Eisker, 1987
	Pigeon	Oral (subchronic)	17 days	Behavioral alterations						Eisker, 1987
	Pigeon	Oral (subchronic)	5 weeks	Behavioral alterations			3			Eisker, 1987
	Starling	Oral (subchronic)	8 weeks	Kidney lesions			1			Eisker, 1987
	Chicken	Single oral dose		Mortality	20	4 [a]	0.25 [c]			Eisker, 1987
	Bantam chicken	Single oral dose		Mortality	190	38 [a]				Finneite, 1979
	Prairie chicken	Single oral dose		Mortality	11.5	2 [a]				Finneite, 1979
	Chukar	Single oral dose		Mortality	26.9	5 [a]	0.2 [b]			Eisker, 1987
	Coturnix	Single oral dose		Mortality	11	2 [a]				Eisker, 1987
	Mallard	Single oral dose		Mortality	2.2	0.4 [a]				Eisker, 1987
	Mallard	Oral (chronic)	3 Generations	Behavioral and reproductive deficiencies			0.007 [c]			Eisker, 1987
	Mallard	Oral (chronic)	NS	Behavioral effects in offspring			0.036 [c]			Finneite, 1979
	Black duck	Oral (subchronic)	28 weeks	Reproduction inhibited, brain lesions			0.22 [c]			Eisker, 1987
	Fulvous whistling duck	Single oral dose		Mortality	37.8	7.6 [a]				Eisker, 1987
	Northern bobwhite	Single oral dose		Mortality	23.8	4.8 [a]				Eisker, 1987
	Bobwhite quail	Oral (acute)	5 days	Mortality	523	105 [a]				Hill et al., 1975
	Japanese quail	Single oral dose		Mortality	14.4	2.9 [a]				Eisker, 1987
	Japanese quail	Oral (subchronic)	3 weeks	Depressed gonad weights			0.81 [c]			Eisker, 1987
	Japanese quail	Oral (subchronic)	9 weeks	Alterations in brain and plasma enzyme activities			0.10 [c]			Eisker, 1987

TABLE H-3 (continued)
SUMMARY OF INGESTION TOXICITY DATA FOR TERRESTRIAL WILDLIFE (REFERENCE TOXICITY VALUES)
SITE INVESTIGATION REPORT
FORT DEVENS

CHEMICAL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	ACUTE*			CHRONIC*		
					ORAL LD50 (mg/kgBW)	RISK CRITERIA (mg/kg BW)	LOAEL (mg/kgBW/day)	NOAEL (mg/kgBW/day)	REFERENCE	
Nickel	Japanese quail	Oral (chronic)	NS	Reproductive effects						Finneite, 1979
	Gray partridge	Single oral dose		Mortality	17.6	3.5 [a]				Eisler, 1987
	Gray pheasant	Oral (subchronic)	30 days	Reduced reproductive ability			0.64			Eisler, 1987
	Ring-necked pheasant	Single oral dose		Mortality	11.5	2.3 [a]				Eisler, 1987
	Mule deer	Single oral dose		Mortality	17.9	3.6 [a]	0.36			Eisler, 1987
	Rhesus monkey	Oral (chronic)	Pregnancy	Maternally toxic and abortif			0.5			Eisler, 1987
	River otter	Single oral dose		Mortality	2	0.4 [a]				Eisler, 1987
	Mink	Single oral dose		Mortality	1	0.2 [a]				Eisler, 1987
	Mink	Oral (subchronic)	2 months	Mortality			0.029 [c]			Eisler, 1987
	Cat	Oral (subchronic)	Day 10-58 (gest)	Increased incidence of anomalous fetuses			0.25			Eisler, 1987
Selenium	Dog	Oral (chronic)	Pregnancy	High incidence of stillbirths		1 [b]				Eisler, 1987
	Rat	Single oral dose		Mortality	67	13.4 [a]				ATSDR, 1987
	Rat	Oral (subchronic)	91 days	Mortality			1.3 [b]		5	ATSDR, 1987
	Rat	Oral (chronic)	2 years	Decreased bodyweight gain			25 [d]		5	ATSDR, 1987
	Japanese quail	Oral (acute)	5 days	NOEL	504 [c]	100.7 [a]	10.1 [b]			Hill and Camardese, 1986
	Dog	Oral (chronic)	2 years	Histologic lesions in bone marrow		6.25 [b]	62.5		25	ATSDR, 1987
	Rat	Oral (chronic)	NS	Selenosis		0.04 [c]	0.004 [b]			Eisler, 1985
	Rat	Oral (chronic)	NS	Histological changes in heart and kidney			0.045			Eisler, 1985
	Rat	Oral (chronic)	2 years	Soft bones, hepatic lesions		0.6 [c]	0.2			ATSDR, 1989
	Japanese quail	Oral (chronic)	NS	Reduced egg hatching			0.06 [b]			Eisler, 1985
Silver	Mallard	Oral (subchronic)	3 months	Reduced hatchability			1.75			Eisler, 1985
	Horse	Single oral dose		MLD	3.3					Eisler, 1985
	Mouse	Intraperitoneal (acute)		Mortality	34	6.8 [a]				NIOSH, 1985
	Rat	Oral (acute)	2 week	Mortality		3624 [b]	362.4 [d]	181.2		ATSDR, 1990
	Mouse	Oral (subchronic)	125 days	Increased hyperactivity		181 [b]	18.1			ATSDR, 1990
	Rat	Oral (chronic)	2.5 years	Decreased hair cystine			4 [d]	0.89		IRIS, 1989
	Rat	Oral (subchronic)	103 days	Decreased hair cystine, hemoglobin		25 [b]	2.5			IRIS, 1989
	Rat	Oral (subchronic)	75-103 days	NOAEL for hematological alterations			33 [d]	6.6		ATSDR, 1991
	Japanese quail	Oral (acute)	5 days	Mortality	96 [c]	20 [a]	2 [b]			Hill and Camardese, 1986
	Zinc	Rat	Single oral dose		Mortality	2510	500 [a]			Sax, 1984
	Rat	Oral (subchronic)	NS	Kidney toxicity			160		Llobet et al., 1988	

TABLE H-3 (continued)
SUMMARY OF INGESTION TOXICITY DATA FOR TERRESTRIAL WILDLIFE (REFERENCE TOXICITY VALUES)
SITE INVESTIGATION REPORT
FORT DEVENS

NOTES:

- [a] For chemicals lacking LOAEL or NOAEL data, an Acute Oral Criterion (AOC) is calculated by applying a factor of 0.2 to the acute LD50; this value is expected to protect 99.9% of the exposed population from acute effects (USEPA, 1986).
[b] Estimated by applying an acute - chronic ratio of 10.
[c] Converted to dose per kilogram body weight by multiplying by ingestion rate and dividing by body weight.
The following ingestion rate and body weight data were used:

Species	Ingestion Rate (kg/day)	Body Weight (kg)	Reference
Rat (Male)	0.025	0.58	USEPA, 1988
Rat (Female)	0.02	0.25	USEPA, 1988
Rat	0.015	0.25	NIOSH, 1985
Rabbit	0.059	2.2	USEPA, 1988
Chicken	0.106	1.16	USEPA, 1988
Bobwhite	0.015	0.17	Kenaga, 1973
California quail	0.014 [e]	0.139	USEPA, 1988
Mallard Duck	0.09	1.25	Ternes, 1980
Duck	0.112 [e]	1.6	USEPA, 1988
Starling	0.01	0.0437	USEPA, 1988
Kestrel	0.01	0.179	USEPA, 1988
Screech Owl	0.0086	0.169	USEPA, 1988
Mink	0.0465	1.613	USEPA, 1988
Mouse	0.0035	0.03	USEPA, 1988
Dog	0.5	14.7	USEPA, 1988

- [d] Estimated by applying a LOAEL - NOAEL ratio of 5 (Newell, et al., 1987).
[e] Ingestion rate estimated from body weight using allometric equation for chickens in USEPA, 1988.
[f] Chrysene data used as surrogate for benzo(a,h,i)perylene

TABLE H-4
Reference Toxicity Values Selected for Derivation of Ecological
Protective Contaminant Levels in Surface Soils [a]

Site Investigation Report
Fort Devens

Analyte	Ecological Receptor					
	Short-tailed shrew	White-footed mouse	American robin	Garter snake	Red fox	Red-tailed hawk
	Reference Toxicity Values (mg/kg body weight/day)					
Organics						
acenaphthene	1125	1125	1125	1125	1125	1125
acenaphthylene	600	600	600	600	600	600
anthracene	3300	3300	3300	3300	3300	3300
benzo(a)anthracene	2	2	2	2	2	2
benzo(a)pyrene	1.25	1.25	1.25	1.25	1.25	1.25
benzo(b)fluoranthene	40	40	40	40	40	40
benzo(g,h,i)perylene	99	99	99	99	99	99
benzo(k)fluoranthene	72	72	72	72	72	72
bis(2-ethylhexyl)phthalate	19	19	19	19	19	19
carbazole	10	10	10	10	10	10
chrysene	99	99	99	99	99	99
dibenzo(a,h)anthracene [d]	1.25	1.25	1.25	1.25	1.25	1.25
dibenzofuran	2.4	2.4	2.4	2.4	2.4	2.4
fluoranthene	250	250	250	250	250	250
fluorene	250	250	250	250	250	250
indeno(1,2,3-cd)pyrene	72	72	72	72	72	72
naphthalene	37.9 [c]	37.9 [c]	37.9 [c]	37.9 [c]	37.9 [c]	37.9 [c]
phenanthrene	120	120	120	120	120	120
pyrene	125	125	125	125	125	125
tetrachloroethylene	71	71	71	71	71	71
toluene	446	446	446	446	446	446
trichlorofluoromethane	488	488	488	488	488	488
xylene (total)	500	500	500	500	500	500
Inorganics						
aluminum	425	425	425	425	425	425
antimony	1.75	1.75	1.75	1.75	1.75	1.75
arsenic	7.5	7.5	5.1 [b]	5.1 [b]	250	5.1 [b]
barium	10.2 [c]	10.2 [c]	10.2 [c]	10.2 [c]	10.2 [c]	10.2 [c]
beryllium	0.22	0.22	0.22	0.22	0.22	0.22
cadmium	1.75	1.75	7.6	7.6	3.75	7.6
chromium	40.6 [c]	40.6 [c]	3.5	3.5	40.6 [c]	3.5
cobalt	12.5 [c]	12.5 [c]	12.5 [c]	12.5 [c]	5	12.5 [c]
copper	76.6 [c]	76.6 [c]	29	29	76.6 [c]	29
lead	2.1	2.1	4.4	4.4	3	4.4
manganese	370 [c]	370 [c]	370 [c]	370 [c]	25	370 [c]
mercury	0.5	0.5	1.85 [b]	1.85 [b]	0.1	1.85 [b]
nickel	50.8 [c]	50.8 [c]	10.1	10.1	62.5	10.1
selenium	0.12 [c]	0.12 [c]	1.75	1.75	0.12 [c]	1.75
silver	18.1	18.1	18.1	18.1	18.1	18.1
vanadium	2.5	2.5	2	2	2.5	2
zinc	160	160	160	160	160	160

NOTES:

[a] All values are chronic Lowest Observed Adverse Effects Levels (LOAELS), unless otherwise noted.

Values were obtained from the master Reference Toxicity Values (RTVs) summary table (I-3)

[b] Average of LOAEL bird values.

[c] Average of LOAEL values.

[d] Benzo(a)pyrene value used as a surrogate for dibenzo(a,h)anthracene.

TABLE H-5
EXPOSURE PARAMETERS FOR TERRESTRIAL WILDLIFE AT SA 21

American woodcock -- <i>Scolopax minor</i>			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Territory size 7.9 to 187 acres.		63 acres [b]
Exposure duration (unitless)	Summer resident, migrant. Mar.- Nov.; Arrives in northern range in early March and leaves in late September		0.75
Diet	68% earthworms; 16% beetles, flies, and insects, 5% other animals, and 10% plants.		Invertebrates: 85% Plants: 10% Soil: 5%
Ingestion rate (kg/day)			0.13 kg fresh weight/day
Body weight (kg)			0.17 kg
Daily inhalation rate (m ³ /day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{\text{ir}} = 0.4089 * BW(\text{kg})^{0.77}$		0.1 m ³ /day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all birds: $L = 0.059 * BW(\text{kg})^{0.67}$		0.018 l/day

[a] All values derived from USEPA (1993) unless otherwise indicated.

[b] Average of reported values.

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TABLE H-5
EXPOSURE PARAMETERS FOR TERRESTRIAL WILDLIFE AT SA 21

Short-tailed shrew -- <i>Blarina brevicauda</i>				
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment	
Home range (acres)			0.9 acres [b]	
Exposure duration (unitless)	Active year-round; longevity is less than 5 months to as much as 20 months.		1.0	
Diet	Diet consists of 61% to 70.5% invertebrates, 11% to 13% vegetation, and approximately 15% "miscellaneous other".		Plants: 15% [c] Invertebrates: 80% [c] Soil: 5%	
Ingestion rate (kg/day)	Reported values of 7.95 g/day and 0.49 to 0.62 g/BW-day		0.0087 kg fresh weight/day [b]	
Body weight (kg)			0.017 kg [b]	
Daily inhalation rate (m ³ /day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{ir} = 0.5458 * BW(kg)^{0.8}$		0.021 m ³ /day	
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.0025 l/day	

[a] All values derived from USEPA (1993) unless otherwise indicated.

[b] Average of reported values.

[c] The 15% of the dietary intake that is "miscellaneous" was accounted for by including 5% soil ingestion, and adding an additional 5% intake to plant ingestion and an additional 4% intake to invertebrate ingestion.

TABLE H-5
EXPOSURE PARAMETERS FOR TERRESTRIAL WILDLIFE AT SA 21

Red fox -- <i>Vulpes vulpes</i>			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)			2600 acres
Exposure duration (unitless)	Active year-round		1.0
Diet	Diet consists of 37% (summer) to 92% (spring) small mammals, 2% (spring) to 43% (summer) birds and eggs, up to 11% invertebrates, and up to 16% vegetation.		Plants: 16% Invertebrates: 4% Small mammals: 61% Birds: 14% Soil: 5%
Ingestion rate (kg/day)	Average of ingestion rates for free-ranging fox		0.41 kg fresh weight/day [b]
Body weight (kg)			4.3 kg [b]
Daily inhalation rate (m ³ /day)			1.8 m ³ /day [b]
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 \cdot BW(kg)^{0.9}$		0.37 l/day

[a] All values derived from USEPA (1993) unless otherwise indicated.

[b] Average of reported values.

EXPARA

TABLE H-5
EXPOSURE PARAMETERS FOR TERRESTRIAL WILDLIFE AT SA 21

Red-tailed hawk -- <i>Buteo jamaicensis</i>			
Exposure parameter	Reported values	Reference [a]	Value selected for ecological risk assessment
Home range (acres)	Range of reported values is 150 to 2512 ha		500 acres [b]
Exposure duration (unitless)	Active year-round		1.0
Diet	Small mammals, nesting birds, insects, carrion, domestic animals.		Plants: 2% Invertebrates: 1% Small mammals: 74% Birds: 18% Soil: 5%
Ingestion rate (kg/day)			0.11 kg fresh weight/day [c]
Body weight (kg)			1.1 kg [c]
Daily inhalation rate (m³/day)	Allometric relationship between body weight (BW) and inhalation rate: $IR_{air} = 0.4089 * BW(kg)^{0.77}$		0.44 m ³ /day
Drinking water intake rate (l/day)	Allometric relationship between body weight (BW) and drinking water rate (L) for all mammals: $L = 0.099 * BW(kg)^{0.9}$		0.063 l/day

[a] All values derived from USEPA (1993) unless otherwise indicated.

[b] Selected as conservative value. Actual range may be greater.

[c] Average of reported values.

Table H-6
Bioaccumulation Data Base Used for Terrestrial Wildlife at SA 21

CHEMICAL	BIOACCUMULATION FACTOR (BAF) [a]			
	Invertebrates	Plants	Small Mammals	Small Birds [b]
INORGANICS				
Aluminum	7.5E-02 [c]	8.0E-04 [d]	7.5E-02 [e]	7.5E-02
Antimony	5.0E-02 [c]	4.0E-02 [d]	5.0E-02 [e]	5.0E-02
Arsenic	6.6E-03 [f]	8.0E-03 [d]	1.0E-01 [e]	1.0E-01
Barium	7.5E-03 [c]	3.0E-02 [d]	7.5E-03 [e]	7.5E-03
Beryllium	5.0E-02 [c]	2.0E-03 [d]	5.0E-02 [g]	5.0E-02
Cadmium	1.1E+01 [h]	3.3E+01 [i]	2.1E+00 [e]	3.8E-01 [j]
Chromium	1.6E-01 [h]	1.5E-03 [d]	2.8E-01 [e]	2.8E-01
Cobalt	1.0E+00 [c]	4.0E-03 [d]	1.0E+00 [e]	1.0E+00
Copper	1.6E-01 [h]	7.8E-01 [k]	6.0E-01 [i]	6.0E-01
Lead	1.5E-02	NA[i]	1.5E-02 [e]	1.5E-02
Manganese	2.0E-02 [c]	5.0E-02 [d]	2.0E-02 [e]	2.0E-02
Mercury	6.8E-02 [l]	1.8E-01 [d]	1.0E-02 [m]	2.3E+00 [m]
Nickel	2.3E-01 [n]	1.2E-02 [d]	3.0E-01 [e]	3.0E-01
Selenium	7.6E-01 [f]	9.0E-03 [o]	7.5E-01 [e]	5.1E-01 [p]
Silver	1.5E-01 [c]	8.0E-02 [d]	1.5E-01 [e]	1.5E-01
Vanadium	1.3E-01 [c]	1.1E-03 [d]	1.3E-01 [e]	1.3E-01
Zinc	1.8E+00 [h]	6.1E-01 [k]	2.1E+00 [q]	2.1E+00

NOTES:

- [a] Units for bioaccumulation factors (BAFs) are (mg/kg fresh wt tissue over mg/kg dry wt soil) for invertebrates and plants, and (mg/kg fresh wt tissue over mg/kg fresh wt. food) for small mammals and small birds.
- [b] Small mammal BAF value used unless otherwise noted.
- [c] Prey-specific value not available; value shown is small mammal BAF for this chemical.
- [d] Value from Baes et al. (1984) multiplied by 0.2 to represent 80% water composition of plants.
- [e] Value derived from biotransfer factors (BTFs), presented in Baes et al. (1984) for uptake into cattle. BTF converted to BAF by multiplying by food ingestion rate of 50 kg/day wet weight.
- [f] Average of values for industrial soils from Beyer and Cromartie (1987) multiplied by 0.2 to represent 80% water composition in earthworms.
- [g] Mean of values reported for *Sorex araneus* in MacFadyen (1980).
- [h] BCF for earthworms from Diercxsens et al. (1985).
- [i] Mammal value for copper and plant value for cadmium from Levine et al., 1989. Lead does not accumulate in plant tissue, therefore, a BAF of zero was assigned.
- [j] Based on accumulation of cadmium in kidneys of European quail in Pimentel et al. (1984).
- [k] Median of values reported from Levine et al. (1989).
- [l] Uptake value (fresh wt./dry wt.) for earthworms from USEPA (1985c) sludge document. Fresh weight tissue concentrations calculated assuming 80% body water content.
- [m] USEPA, 1985c.
- [n] Value from nickel sludge document (USEPA, 1985) multiplied by 0.2 to represent 80% water composition of earthworms.
- [o] Average of values for industrial soils from Beyer and Cromartie (1987) multiplied by 0.2 to represent 80% water composition in earthworms.
- [p] Based on average of reported ratio of selenium in diet to liver, kidney, and breast tissue of chickens (Eisler, 1985a).
- [q] Mean of values for *Microtus agrestis* and *Apodemus sylvaticus* in MacFadyen (1980).
- NA = Not applicable.

TABLE H-7
Ingestion Toxicity Data Base Used for Terrestrial Wildlife at SA 21

ANALYTE	ACUTE (mg/kgBW - day) ORAL LD ₅₀	CHRONIC (mg/kgBW - day) LOAEL NOAEL	TEST SPECIES	TEST TYPE	DURATION	EFFECT	REFERENCE
INORGANICS							
Aluminum		425	Mouse	Oral (chronic)	2-3 genitns	Reduced body weight gain of newborns	NIOSH, 1985
Antimony		41.8 (food)	Rat	Oral (subchronic)	24 weeks	Decreased RBC, swelling of hepatic cords	ATSDR, 1990
Arsenic		3.1	Dog	Oral (chronic)	2 years	Mortality	ATSDR, 1991
Barium	198		Rat	Oral (acute)	10 days	Decreased ovarian weight	ATSDR, 1990
Beryllium		10	Rat	Oral (subchronic)	24 - 28 days	Rickets	ATSDR, 1991
Cadmium		12.5	Rat	Oral (subchronic)	Gest., days 6-15	NOAEL for reproductive effects	Machener & Lorko, 1981
Chromium (III)		1,400	Rat	Oral (subchronic)	90 days	NOAEL for histopathologic and reproductive effects	Ivankovic and Preussman, 1975
		200	Black Duck	Oral (subchronic)	5 months	NOAEL for reproductive effects	Outridgz and Scheuhammer, 1983
Cobalt		20	Rat	Oral (chronic)	69 days	Testicular atrophy	ATSDR, 1990
Copper		100	Mice	Oral (chronic)	30 days	Decreased litter sizes with teratogenic effects	Lecky, 1980
Lead		7	Rat	Oral (chronic)	2 generations	NOAEL for developmental effects	Kimmel et al., 1980 and
		6.25	Rock dove	Oral (chronic)	NS	Kidney pathology; learning deficiencies	Anders et al., 1982 and
Manganese		250	Rodents/livestock	Oral (subchronic)	10 days - 2 months	Decreased growth rate	Cunningham et al., 1966
Mercury		0.7	Mouse	Oral (subchronic)	Day 0-18 (gest)	Embryolethality and teratogenicity	Suzuki, 1979
		0.22	Black duck	Oral (chronic)	28 weeks	Reproduction inhibited, brain lesions	Eisler, 1987
		0.1	Dog	Oral (chronic)	Pregnancy	High incidence of stillbirths	Eisler, 1987
Nickel	504	50	Rat	Oral (chronic)	2 years	Decreased body weight gain	ATSDR, 1991
		10 [b]	Japanese quail	Oral (acute)	5 days	NOAEL	Hill and Camardese, 1986
		62.5	Dog	Oral (chronic)	2 years	Histological lesions in bone marrow	ATSDR, 1991
Selenium		0.4	Rat	Oral (chronic)	2 years	Decrease in breeding	ATSDR, 1988
		0.6	Japanese quail	Oral (chronic)	NS	Reduced egg hatching	Eisler, 1985
Silver		18.1	Mouse	Oral (chronic)	125 days	Hypocativity	ATSDR, 1990
Vanadium		15	Rat	Oral (subchronic)	2 months	Hypertension	Susic and Kentera, 1986
		11	Chicken	Oral (subchronic)	6 weeks	Decrease in egg-laying	USEPA, 1988
Zinc		200	Rat	Oral	Gestation	Fetal resorptions in 4 to 20% of population	Shlicker and Cox, 1968

NOTES:

[a] For chemicals lacking LOAEL or NOAEL data, an Acute Oral Criterion (AOC) is calculated by applying a factor of 0.2 to the acute LD₅₀; this value is expected to protect 99.9% of the exposed population from acute effects (USEPA, 1986).

[b] Estimated by applying an acute-chronic ratio of 10.

NS = Not Stated

BW = Body Weight

LD₅₀ = Lethal dose to 50% of the test population.

LOAEL = Lowest Observed Adverse Effect Level.

NOAEL = No Observed Adverse Effect Level.

TABLE H-8
Reference Toxicity Values Used for Terrestrial Wildlife at SA 21

Chemical	Short-tailed Shrew	American Woodcock	Red Fox	Red-tailed Hawk
INORGANICS (mg/kgBW-day)				
Aluminum	425	425	425	425
Antimony	41.8	41.8	41.8	41.8
Arsenic	3.1	3.1	3.1	3.1
Barium	198	198	198	198
Beryllium	10	10	10	10
Cadmium	12.5	12.5	12.5	12.5
Chromium (III)	1,400	200	1,400	200
Cobalt	20	20	20	20
Copper	100	100	100	100
Lead	7	6.25	7	6.25
Manganese	250	250	250	250
Mercury	0.7	0.22	0.1	0.22
Nickel	50	10	62.5	10
Selenium	0.4	0.6	0.4	0.6
Silver	18.1	18.1	18.1	18.1
Vanadium	15	11	15	11
Zinc	200	200	200	200

Notes:

¹ Reference Toxicity Values (RTVs) from the ingestion toxicity database presented in Table H-7.

**TABLE H-9
ECOLOGICAL PROTECTIVE CONTAMINANT LEVELS FOR ANALYTES DETECTED AT SA 21**

Analyte	Shrew	Woodcock	Fox	Hawk	PCL
Inorganics (mg/kg)					
Aluminum	1.4E+04	6.2E+05	4.1E+08	7.8E+07	1.4E+04
Antimony	1.5E+03	7.1E+04	3.8E+07	7.8E+06	1.5E+03
Arsenic	1.9E+02	9.1E+03	3.2E+06	5.9E+05	1.9E+02
Barium	1.2E+04	5.5E+05	2.0E+08	3.9E+07	1.2E+04
Beryllium	3.9E+02	1.8E+04	1.0E+07	1.9E+06	3.9E+02
Cadmium	3.3E+00	1.7E+02	4.4E+04	1.0E+04	3.3E+00
Calcium	NA	NA	NA	NA	NA
Chromium	2.8E+04	1.8E+05	1.0E+09	2.8E+07	2.8E+04
Cobalt	8.3E+01	3.7E+03	2.9E+06	4.9E+05	8.3E+01
Copper	1.2E+03	6.2E+04	2.3E+07	7.1E+06	1.2E+03
Iron	NA	NA	NA	NA	NA
Lead	4.0E+02	1.6E+04	7.5E+06	1.2E+06	4.0E+02
Magnesium	NA	NA	NA	NA	NA
Manganese	1.2E+04	5.7E+05	2.3E+08	4.8E+07	1.2E+04
Mercury	1.9E+01	2.9E+02	6.6E+04	4.0E+04	1.9E+01
Nickel	7.5E+02	6.7E+03	4.0E+07	1.2E+06	7.5E+02
Potassium	NA	NA	NA	NA	NA
Selenium	2.1E+00	1.4E+02	8.7E+04	2.3E+04	2.1E+00
Silver	3.5E+02	1.6E+04	1.3E+07	2.8E+06	3.5E+02
Sodium	NA	NA	NA	NA	NA
Vanadium	3.5E+02	1.2E+04	1.3E+07	1.9E+06	3.5E+02
Zinc	4.5E+02	2.0E+04	8.2E+06	1.4E+06	4.5E+02

NOTES:

NA = Not Available. No bioaccumulation or benchmark data are available for calculating PCLs.

APPENDIX I
SYNOPTIC WATER LEVEL DATA

SUMMARY OF SYNOPTIC WATER-LEVEL MEASUREMENTS

ABB-ES conducted synoptic water-level measurement rounds at Fort Devens on a quarterly basis from May 1992 through January 1995. Water levels were measured in monitoring wells and in rivers and ponds. The number of measuring points varied because new measuring locations were added during the SI program and because certain stations were not accessible or not measurable. Elevations of the water table and surface-water bodies measured at locations at and near the Group 3, 5 & 6 Study Areas are tabulated in Table I-1.

Water levels were measured at the Group 3, 5 & 6 stations as follows:

ROUND	DATE	WELLS MEASURED	STREAMS/ PONDS MEASURED
1	26 May 1992	25	3
2	15 September 1992	45	4
3	22 December 1992	43	3
4	31 March 1993	40	4
5	22 June 1993	43	4
6	30 September 1993	52	3
7	8 November 1993	54	3
8	30 March 1994	51	2
9	28 June 1994	56	4
10	4 October 1994	60	4
11	31 January 1995	57	4

ABB Environmental Services, Inc.

TABLE I-1
SYNOPTIC WATER-LEVEL MEASUREMENTS¹
GROUPS 3, 5, & 6

FORT DEVENS, MASSACHUSETTS

STATION/ WELL NO.	26 MAY 1992	15 SEPT. 1992	22 DEC. 1992	31 MAR. 1993	22 JUNE 1993	30 SEPT. 1993	8 NOV. 1993	30 MAR. 1994	28 JUNE 1994	4 OCT. 1994	31 JAN. 1995
G3M-92-01X	NI ²	227.00	226.64	227.02	227.38	226.69	226.44	227.51	227.99	227.51	227.67
G3M-92-02X	NI	224.73	224.51	224.84	225.08	224.18	224.19	225.31	225.47	225.21	225.46
G3M-92-03X	NI	224.98	224.43	224.75	225.38	224.26	224.15	225.25	225.80	225.41	225.56
G3M-92-04X	NI	224.33	223.77	NM ³	224.75	223.59	223.46	224.46	225.21	224.77	224.80
G3M-92-05X	NI	224.51	223.90	224.45	224.94	223.87	223.74	224.65	225.45	225.03	225.15
G3M-92-06X	NI	226.53	225.87	226.42	226.99	225.89	225.75	227.17	227.61	227.12	227.26
G3M-92-07X	NI	225.02	224.65	225.10	225.42	224.08	224.35	225.46	225.84	225.49	225.77
G3M-93-08X	NI	NI	NI	NI	NM	223.41	221.72	224.17	224.91	224.66	NM
G3M-93-09X	NI	NI	NI	NI	NM	223.12	223.05	225.09	224.54	224.32	225.03
G3M-93-10X	NI	NI	NI	NI	NM	224.62	224.53	225.59	226.32	225.86	225.94
G3M-93-11X	NI	NI	NI	NI	NM	224.81	224.67	225.75	226.52	226.06	226.12
MNG-1	224.34	224.29	NM	NM	224.67	NM	223.47	224.35	225.07	248.89	224.75
MNG-2	218.30	217.99	218.43	219.02	218.14	218.07	217.95	219.05	218.23	218.46	218.64
MNG-3	216.95	217.12	217.63	218.53	217.21	217.31	217.20	218.38	217.20	217.41	217.75
MNG-4	221.57	221.39	NM	NM	NM	NM	NM	NM	NM	NM	NM
MNG-5	219.93	219.73	219.63	220.07	219.94	NM	219.26	220.21	220.18	237.21	220.21
MNG-6	218.24	218.18	218.48	218.95	218.33	218.18	218.08	218.99	218.37	254.70	218.80
MNG-7	218.65	218.69	218.70	219.02	NM	214.19	214.11	NM	218.13	218.27	218.50
SWEL-04 ⁴	NM	216.90	NM	218.30	213.45	NM	NM	NM	215.13	215.12	215.34
SWEL-05 ⁵	217.84	216.79	217.62	218.64	215.14	215.28	214.90	NM	215.18	215.25	215.44
GRM-01A	NI	NI	NI	NM	NM	220.56	220.48	188.89	221.51	221.26	221.49
GRM-01B	NI	NI	NI	NM	NM	218.92	218.87	186.02	219.28	219.27	219.54
GRM-01C	NI	NI	NI	NM	NM	218.93	218.87	215.45	219.28	219.28	219.54
G5M-92-01X	NI	206.14	206.83	207.79	206.42	204.14	204.98	211.25	206.65	205.53	208.31
G5M-92-02X	NI	206.64	207.36	209.34	207.22	204.93	205.98	211.14	207.63	206.34	208.58
G5M-92-03A	NI	212.67	Dry	212.60	238.48	Dry	238.48	212.69	Dry	Dry	NM

TABLE I-1
SYNOPTIC WATER-LEVEL MEASUREMENTS¹
GROUPS 3, 5, & 6

FORT DEVENS, MASSACHUSETTS

STATION/ WELL NO.	26 MAY 1992	15 SEPT. 1992	22 DEC. 1992	31 MAR. 1993	22 JUNE 1993	30 SEPT. 1993	8 NOV. 1993	30 MAR. 1994	28 JUNE 1994	4 OCT. 1994	31 JAN. 1995
G5M-92-03B	NI	205.53	206.45	208.84	205.92	204.17	205.11	210.69	206.62	205.71	207.31
WWTMW-01	210.31	208.65	209.31	210.93	209.67	207.09	208.02	211.99	210.26	208.60	210.92
WWTMW-01A	204.30	203.76	205.47	208.12	203.50	203.37	203.75	209.14	204.28	204.82	205.63
WWTMW-02	203.87	203.45	205.15	208.04	203.02	203.18	203.28	208.60	203.23	204.21	205.02
WWTMW-02A	203.79	203.37	205.04	208.51	202.90	203.10	203.11	208.51	202.97	204.09	204.87
WWTMW-03	203.31	202.92	204.73	208.63	202.26	202.69	202.60	208.34	202.14	203.59	204.25
WWTMW-04	204.75	204.05	205.60	207.22	203.81	203.14	203.20	208.40	203.74	204.07	205.77
WWTMW-05	202.83	202.49	204.27	207.74	201.72	202.30	201.99	207.24	201.79	203.19	203.81
WWTMW-06	220.76	215.82	216.70	NM	219.11	214.42	215.00	NM	219.89	215.17	223.30
WWTMW-07	218.19	213.97	216.54	NM	215.61	213.21	214.78	NM	216.83	213.86	218.91
WWTMW-08	209.35	207.89	208.60	209.35	208.83	206.39	207.28	211.88	209.23	207.76	210.05
WWTMW-09	203.45	203.13	205.06	NM	202.66	203.14	203.23	208.94	207.69	204.15	201.73
WWTMW-10	203.22	202.90	204.83	208.99	202.44	202.99	202.86	208.05	202.39	203.93	204.25
WWTMW-11	202.92	202.59	204.38	208.93	202.03	202.52	202.22	207.54	201.97	203.45	203.88
WWTMW-12	203.99	203.58	204.98	206.99	203.09	203.29	203.31	207.91	203.44	204.27	205.15
WWTMW-13	203.90	203.44	205.15	206.92	203.23	203.28	203.23	208.07	203.20	204.23	205.15
WWTMW-14	208.80	207.95	207.57	209.03	209.30	206.99	204.87	210.22	209.27	207.83	208.82
SWEL-02 ⁶	201.92	201.72	203.84	210.52	201.24	202.12	201.74	207.09	217.82	203.17	202.65
G6M-92-01X	NI	204.97	205.07	205.31	205.19	203.56	203.69	206.41	205.11	204.88	206.00
G6M-92-02X	NI	203.16	203.90	204.41	203.37	202.26	202.19	206.03	203.20	203.54	204.68
G6M-92-03X	NI	206.43	206.16	206.44	207.31	204.98	204.84	207.07	207.18	206.21	207.05
G6M-92-04X	NI	202.58	203.92	204.77	202.16	202.11	202.05	206.55	202.06	203.23	204.14
G6M-92-05X	NI	202.87	204.09	204.53	202.45	202.29	202.25	206.59	202.38	203.46	204.35
G6M-92-06X	NI	205.44	205.50	205.79	205.55	204.04	204.21	206.96	205.59	205.38	206.48
G6M-92-07X	NI	206.94	206.58	206.94	207.40	205.42	205.44	207.57	207.46	206.67	207.56
G6M-92-08X	NI	208.73	NM	208.63	209.47	NM	207.26	262.94	262.94	262.94	NM

TABLE I-1
SYNOPTIC WATER - LEVEL MEASUREMENTS¹
GROUPS 3, 5, & 6

FORT DEVENS, MASSACHUSETTS

STATION/ WELL NO.	26 MAY 1992	15 SEPT. 1992	22 DEC. 1992	31 MAR. 1993	22 JUNE 1993	30 SEPT. 1993	8 NOV. 1993	30 MAR. 1994	28 JUNE 1994	4 OCT. 1994	31 JAN. 1995
G6M-92-09X	NI	209.81	209.21	209.58	210.33	208.32	208.30	210.16	210.60	209.69	210.20
G6M-92-10X	NI	211.69	211.73	213.43	212.55	210.91	210.96	214.46	212.94	212.03	212.92
G6M-92-11X	NI	211.87	211.78	212.39	212.55	210.87	211.07	213.66	213.07	212.18	213.04
G6M-93-12X	NI	NI	NI	NI	NM	211.11	211.21	215.61	214.13	213.13	213.64
G6M-93-13X	NI	NI	NI	NI	NM	210.33	210.52	212.98	212.98	212.11	212.70
G6M-93-14X	NI	NI	NI	NI	NM	210.71	211.07	215.25	213.99	212.78	213.73
G6M-94-15A	NI	NI	NI	NI	NI	NI	NI	NI	NI	213.33	214.05
G6M-94-16X	NI	NI	NI	NI	NI	NI	NI	NI	NI	216.16	216.63
G6M-94-17A	NI	NI	NI	NI	NI	NI	NI	NI	NI	214.39	215.27
G6M-94-18X	NI	NI	NI	NI	NI	NI	NI	NI	NI	211.74	212.53
G6M-95-19X	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	212.42
G6M-95-20X	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	212.77
G6P-95-01X	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	214.08
G6P-95-02X	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	214.08
ITMW-4	NI	NI	NI	NI	NI	NI	NI	NI	212.60	210.94	211.84
ITMW-5	NI	NI	NI	NI	NI	NI	NI	NI	209.98	206.61	209.27
SWEL-01 ⁷	200.72	200.08	202.31	208.06	199.55	200.84	199.70	204.91	221.16	201.55	201.38
MCPHERSON	186.49	NM	182.49	213.49	NM	182.49	NM	NM	NM	NM	NM

NOTES: 1. Water level elevations referenced to National Geodetic Vertical Datum (1929)

2. NI = Not installed

3. NM = Not measured

3. Plow Shop Pond

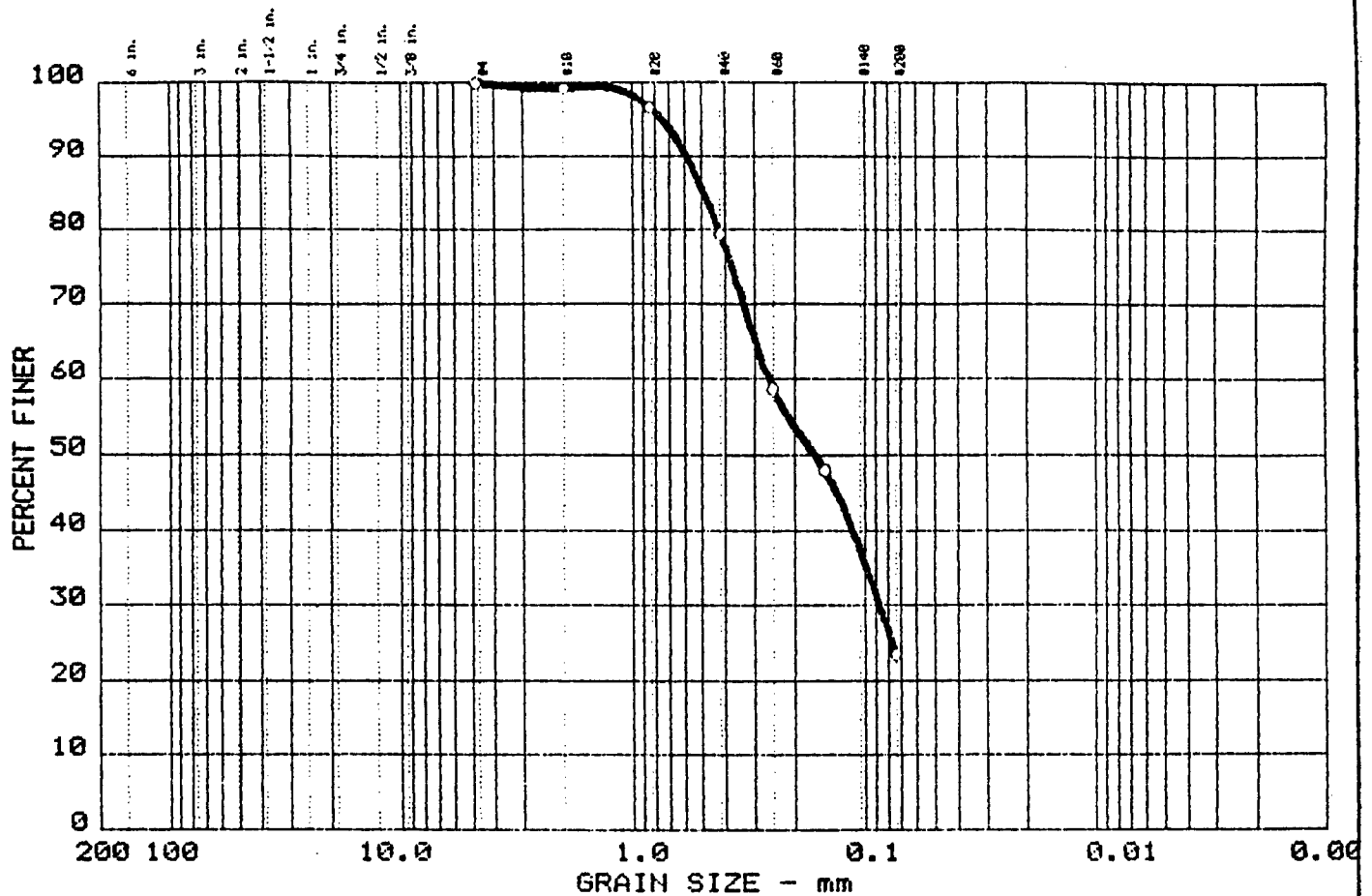
5. Grove Pond

6. Nashua River at Bailey bridge (North Post)

7. Nashua River at Rte. 2A bridge

APPENDIX J
GEOTECHNICAL DATA

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.1	76.5	23.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.49	0.26	0.16	0.087				

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND	SM	--

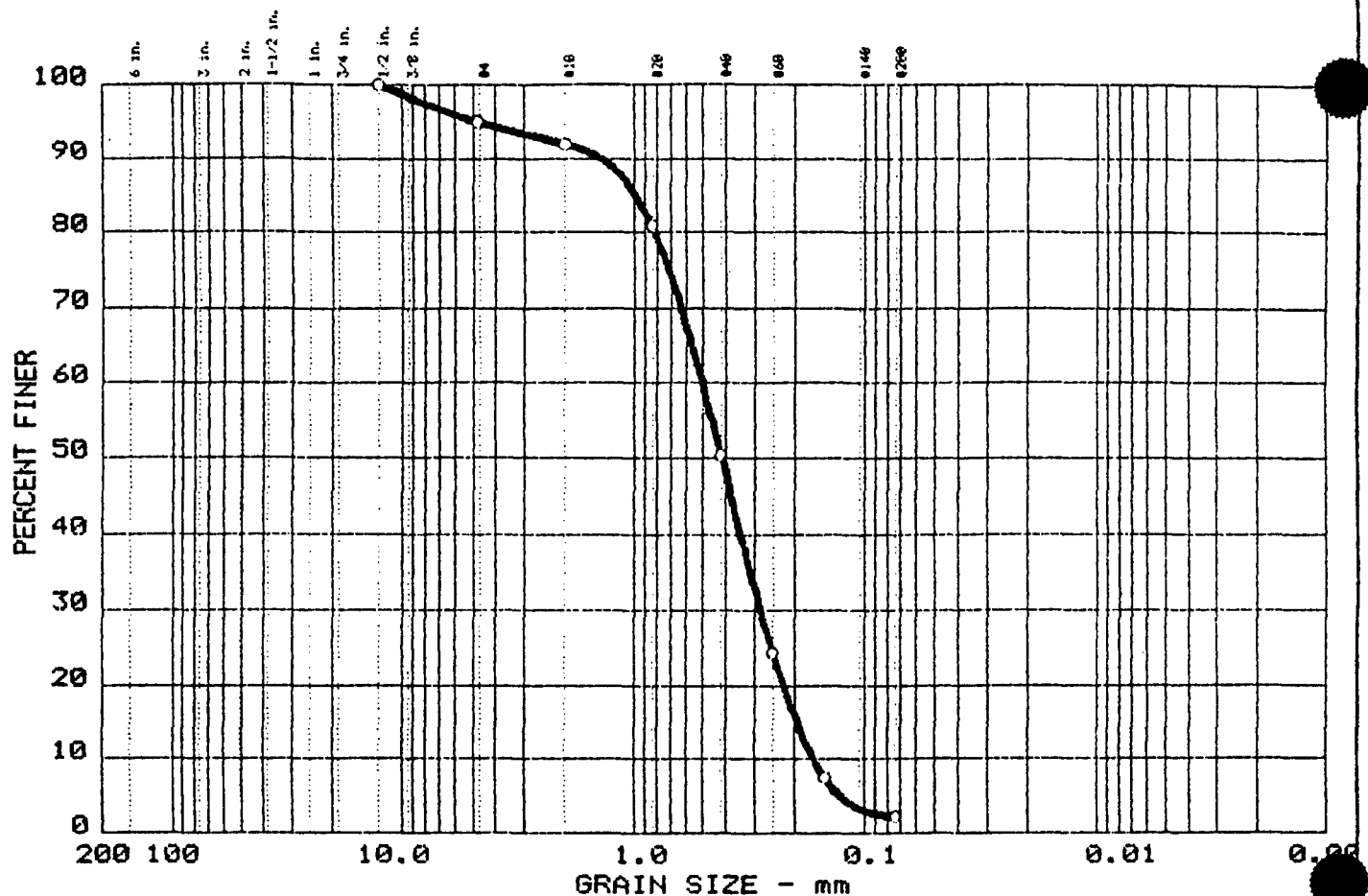
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. - BX630125
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. G3M-92-01X
 As rec'd w% = 20.26

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	5.0	92.8	2.2

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.98	0.51	0.42	0.281	0.1963	0.1652	0.95	3.1

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	--

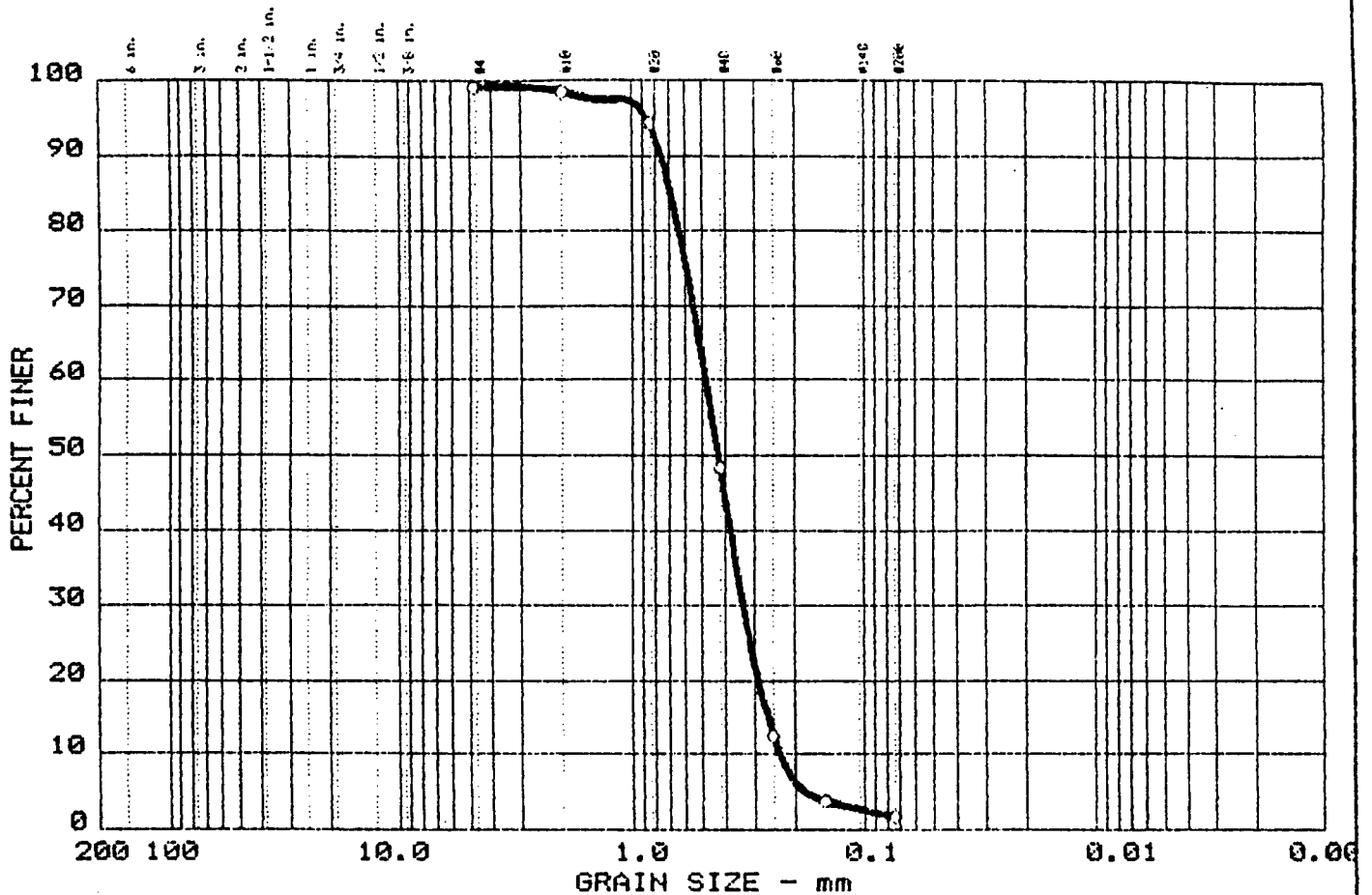
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 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. - BX630225
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 63M-9202X
 As rec'd w% = 20.1

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	98.3	1.7

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.68	0.48	0.43	0.334	0.2636	0.2339	0.99	2.1

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

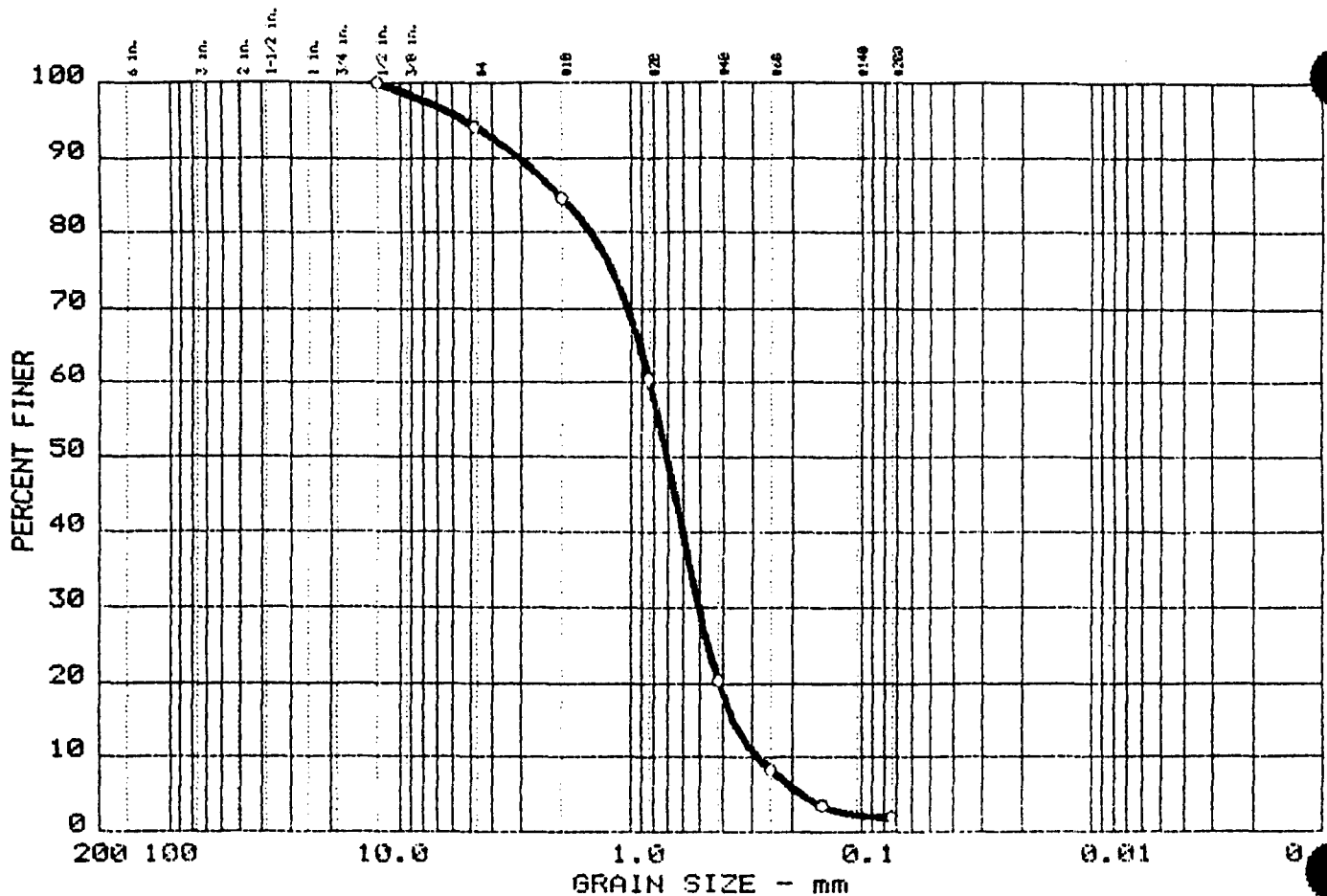
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BX630325
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 63M-92-03X
 As rec'd w% = 23.9

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	5.8	92.2	2.0

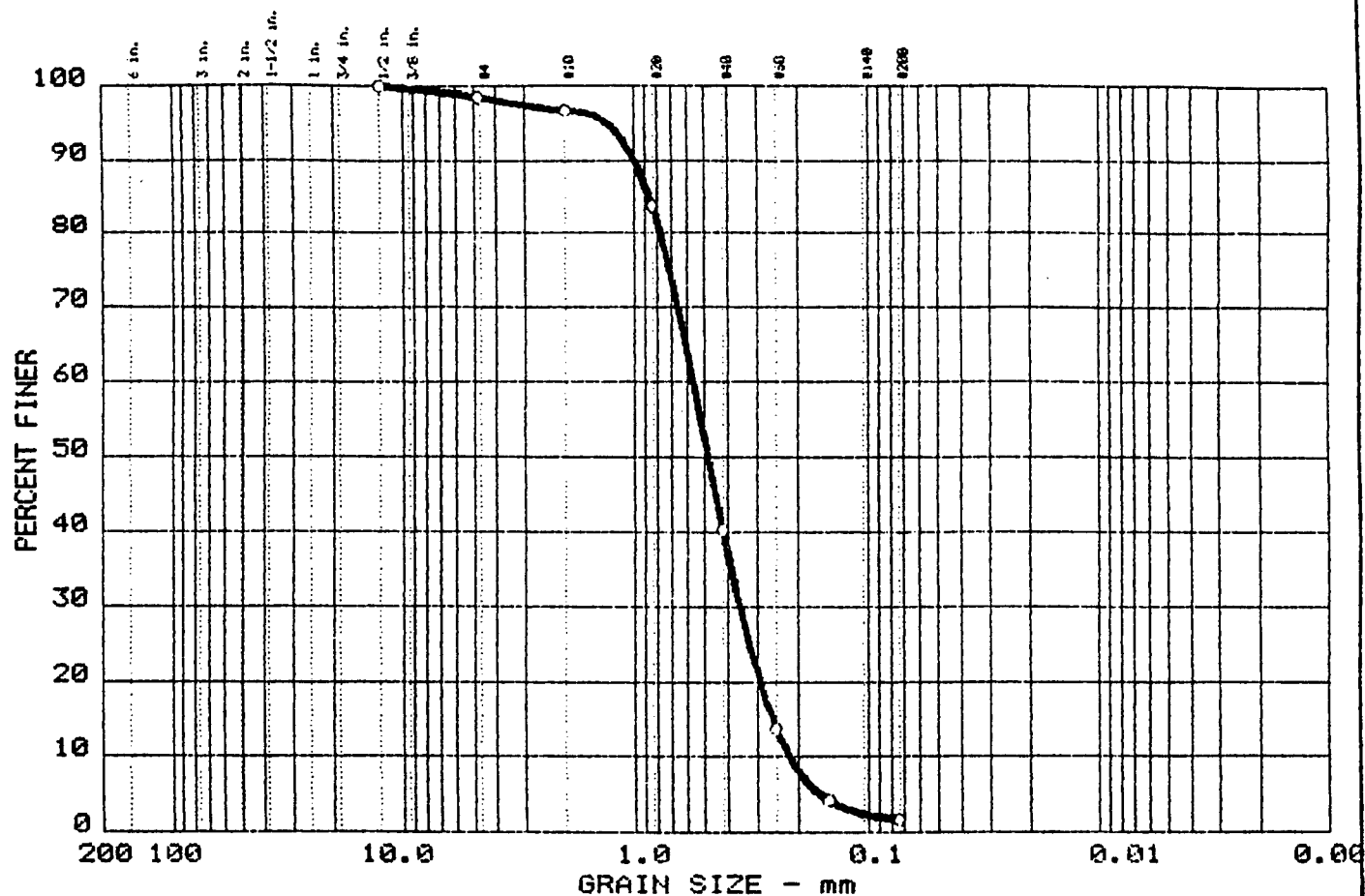
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	2.04	0.83	0.70	0.506	0.3581	0.2812	1.10	3.0

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 ○ Location: Field Sample I.D. - BX630424 Date: July 15, 1992	Remarks: Wash Sieve Analysis Site I.D. G3M-92-04X As rec'd w% = 12.2
GRAIN SIZE DISTRIBUTION TEST REPORT CIVILTEST LABORATORIES, INC.	

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	1.6	96.8	1.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.86	0.56	0.48	0.355	0.2585	0.2175	1.03	2.6

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

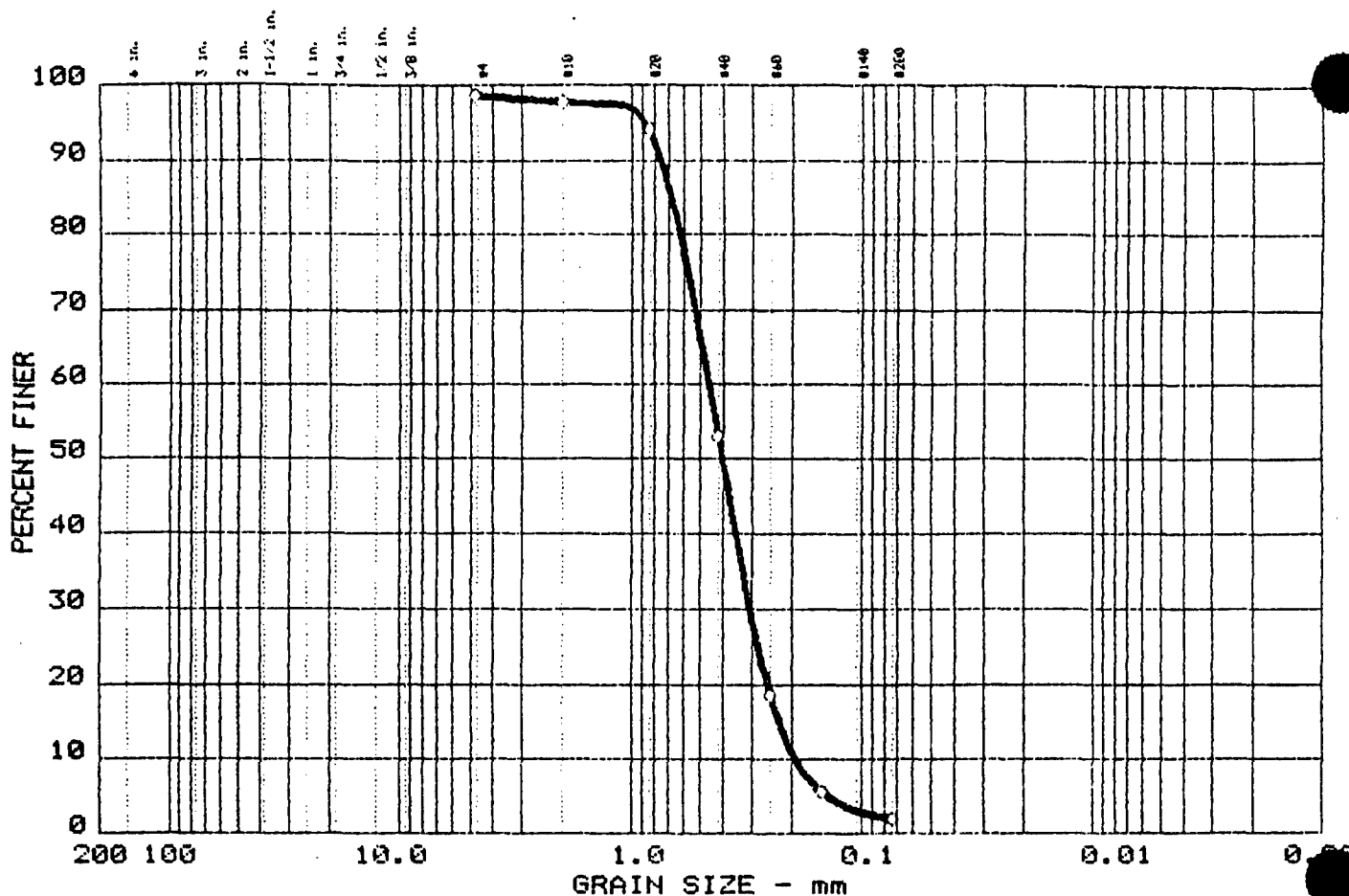
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. BX630530
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 63M-92-05X
 As rec'd w% = 21.5

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CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	1.4	96.6	2.0

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.67	0.46	0.40	0.305	0.2291	0.1943	1.04	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. BXG30626

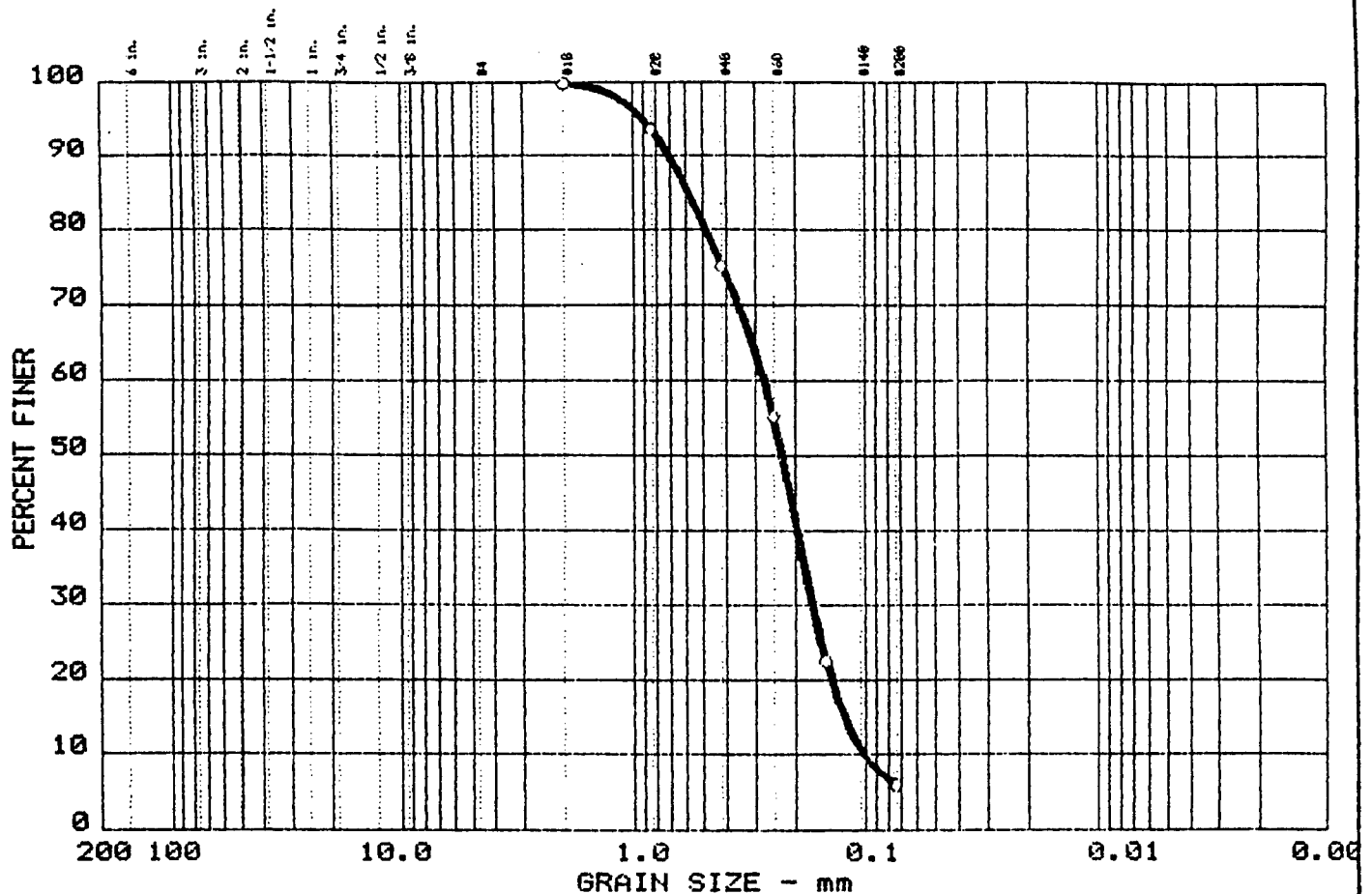
Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. G3M-92-06X
 As rec'd w% = 23.5

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	94.1	5.9

LL	PI	D ₃₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.58	0.27	0.23	0.169	0.1242	0.1009	1.04	2.7

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND with Silt	SP-SM	--

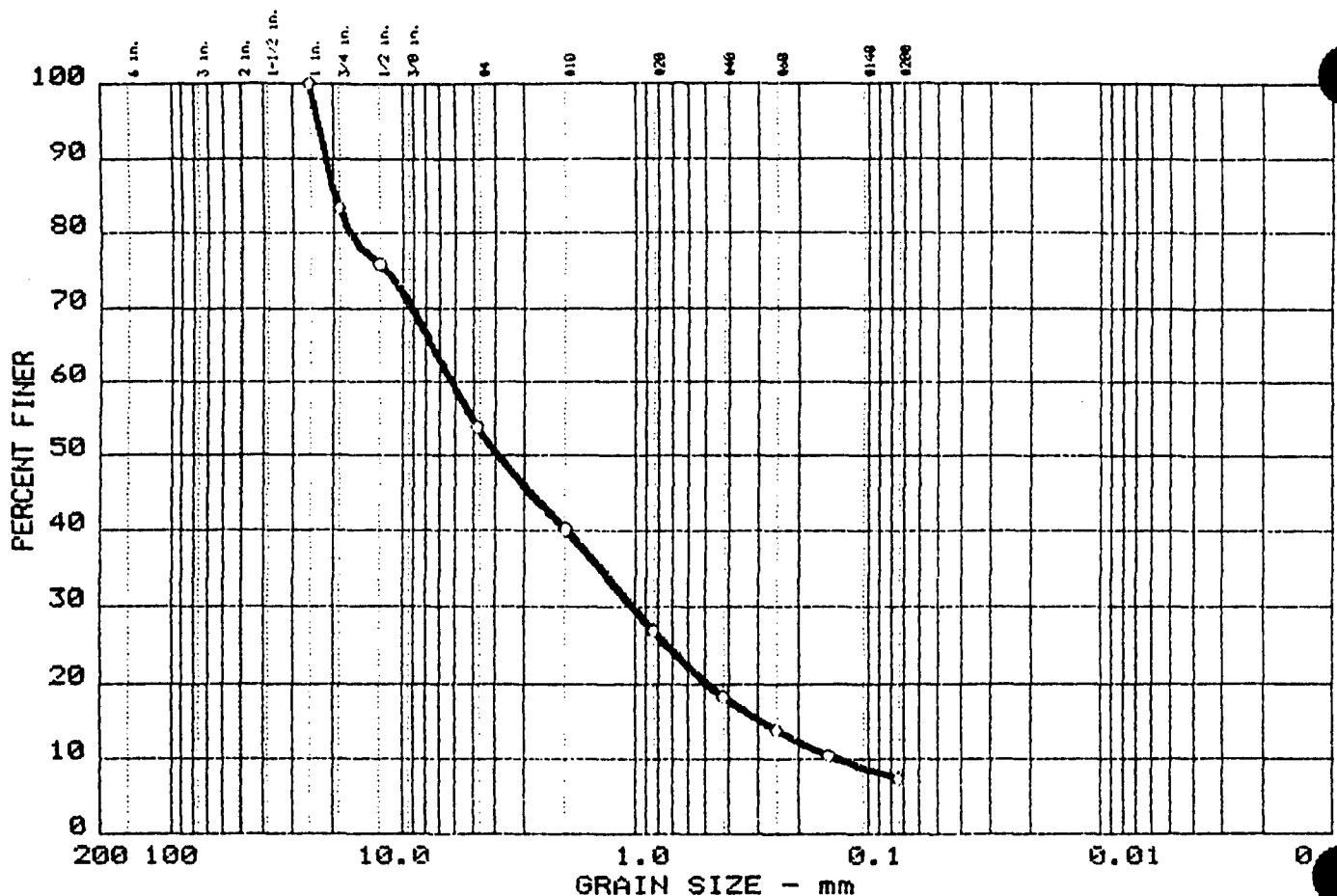
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. BX630725
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 63M-92-07X
 As rec'd w% = 23.9

GRAIN SIZE DISTRIBUTION TEST REPORT
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GRAIN SIZE DISTRIBUTION TEST REPORT



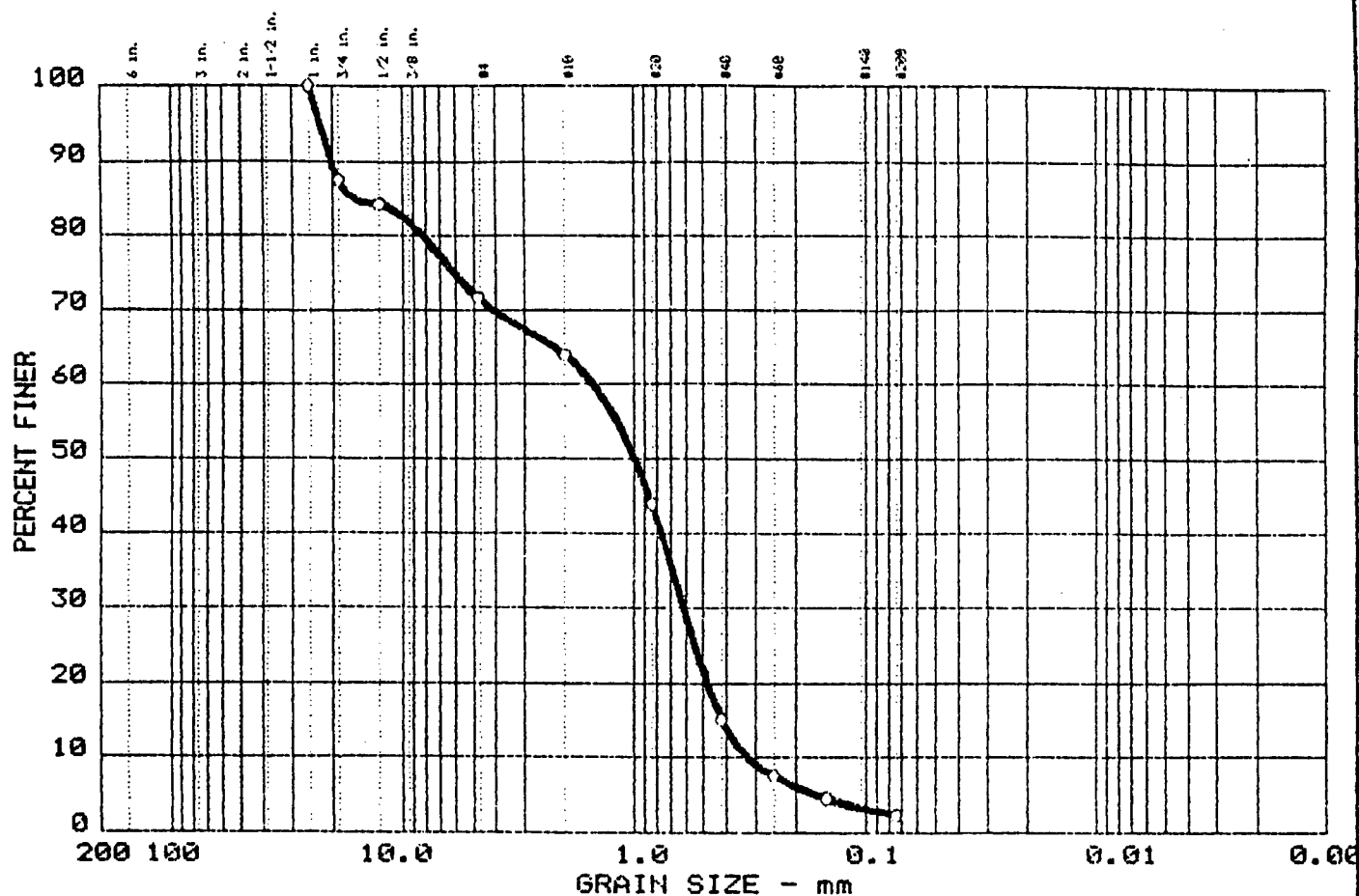
% +3"	% GRAVEL	% SAND	% FINES
0.0	46.2	46.4	7.4

LL	PI	D ₉₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	19.72	6.15	3.88	1.021	0.2877	0.1315	1.29	46.8

MATERIAL DESCRIPTION	USCS	AASHTO
Well-Graded SAND with Gravel and Silt	SW-SM	--

<p>Project No.: 06917.04</p> <p>Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6</p> <p>Location: Field Sample I.D. BXG50130</p> <p>Date: July 15, 1992</p> <p style="text-align: center;">GRAIN SIZE DISTRIBUTION TEST REPORT</p> <p style="text-align: center;">CIVILTEST LABORATORIES, INC.</p>	<p>Remarks:</p> <p>Wash Sieve Analysis</p> <p>Site I.D. GM-92-01X</p> <p>As rec'd w% = 8.2</p> <p style="text-align: right;">CT - 3092</p>
---	--

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	28.4	69.2	2.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	16.22	1.50	1.00	0.612	0.4169	0.3236	0.77	4.6

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND with Gravel	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BXG50216
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 05M-92-03X
 As rec'd w% = 15.2

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

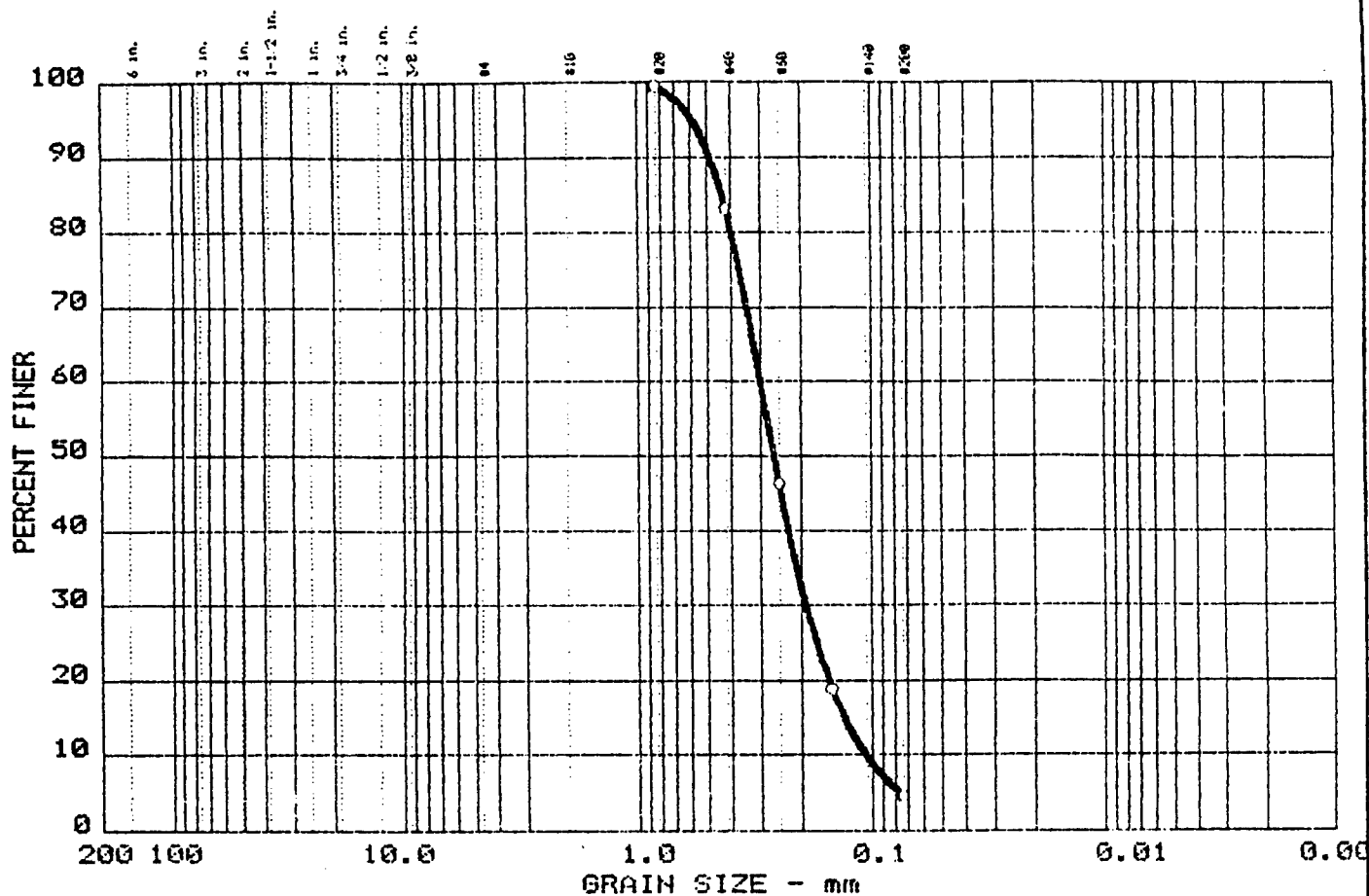
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Grain size distribution curve showing Percent Finer versus Grain Size (mm). The curve is plotted on a semi-logarithmic scale.

Grain Size (mm)	Percent Finer (%)
4.75	100
2.5	80
1.18	75
0.85	65
0.6	53
0.425	40
0.3	30
0.25	28
0.15	19
0.106	12
0.075	8
0.053	5

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	95.4	4.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.43	0.30	0.26	0.192	0.1321	0.1062	1.15	2.8

MATERIAL DESCRIPTION	USCS	AASHTO
0 Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 0 Location: Field Sample I.D. - BXG60150

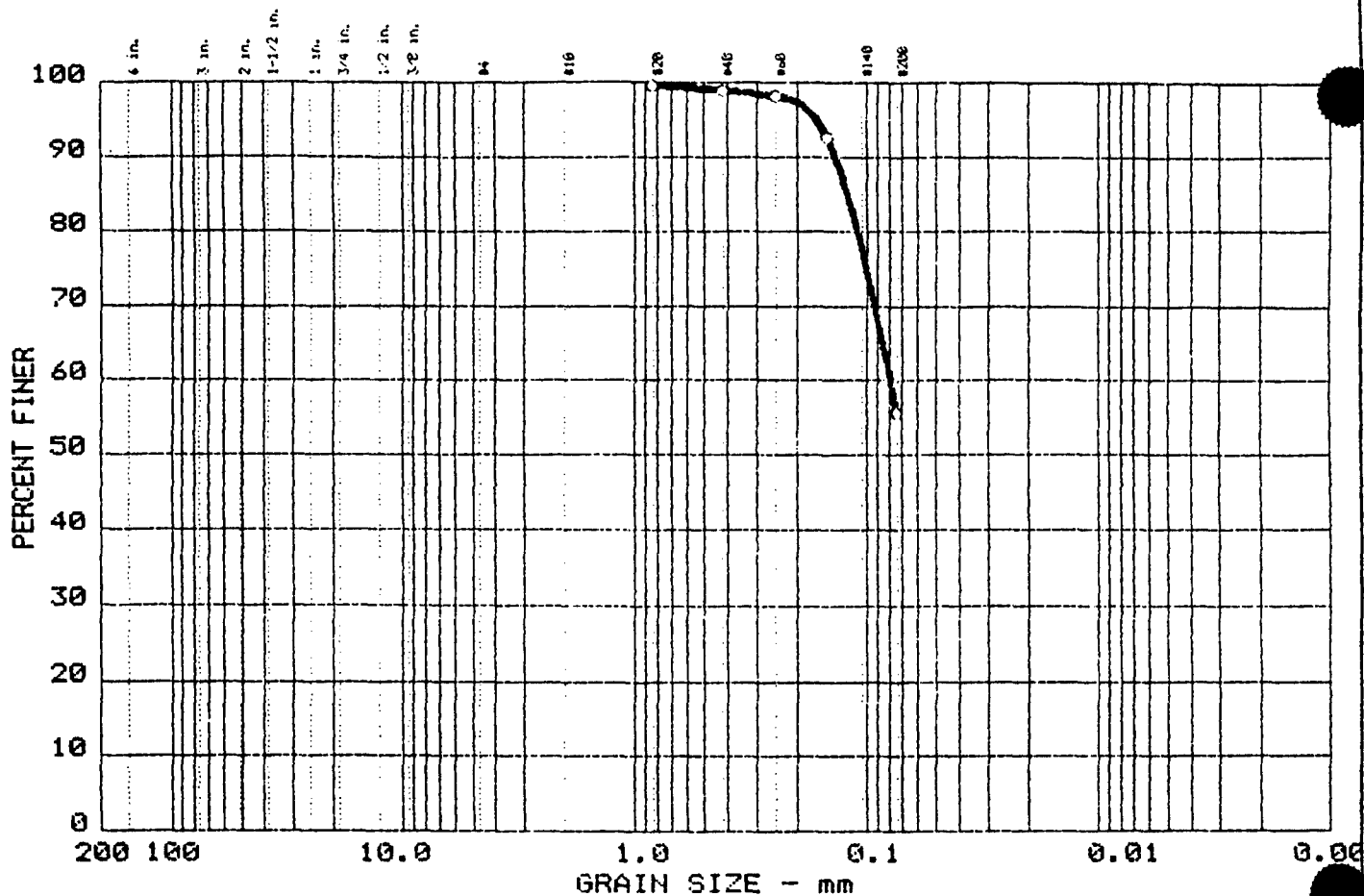
Date: July 15, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. G6M-92-01X
 As rec'd w% = 2.3

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	44.3	55.7

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.12	0.08						

MATERIAL DESCRIPTION	USCS	AASHTO
○ Sandy SILT	ML	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BXG60265

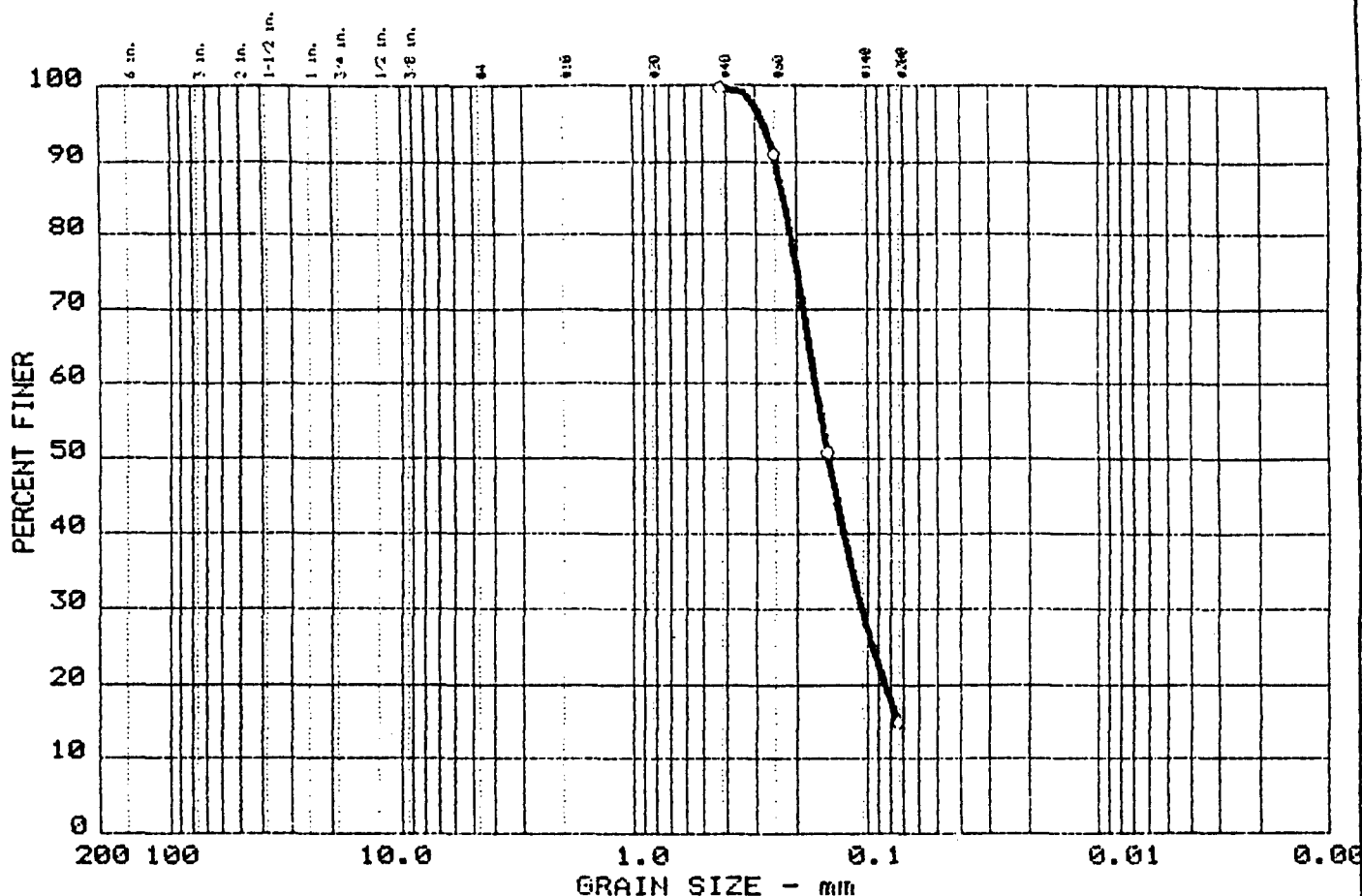
Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. G6M-92-02X
 As rec'd w% = 22.5

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	85.1	14.9

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.23	0.17	0.15	0.106	0.0741			

MATERIAL DESCRIPTION	USCS	AASHTO
○ Silty SAND	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BXG60362

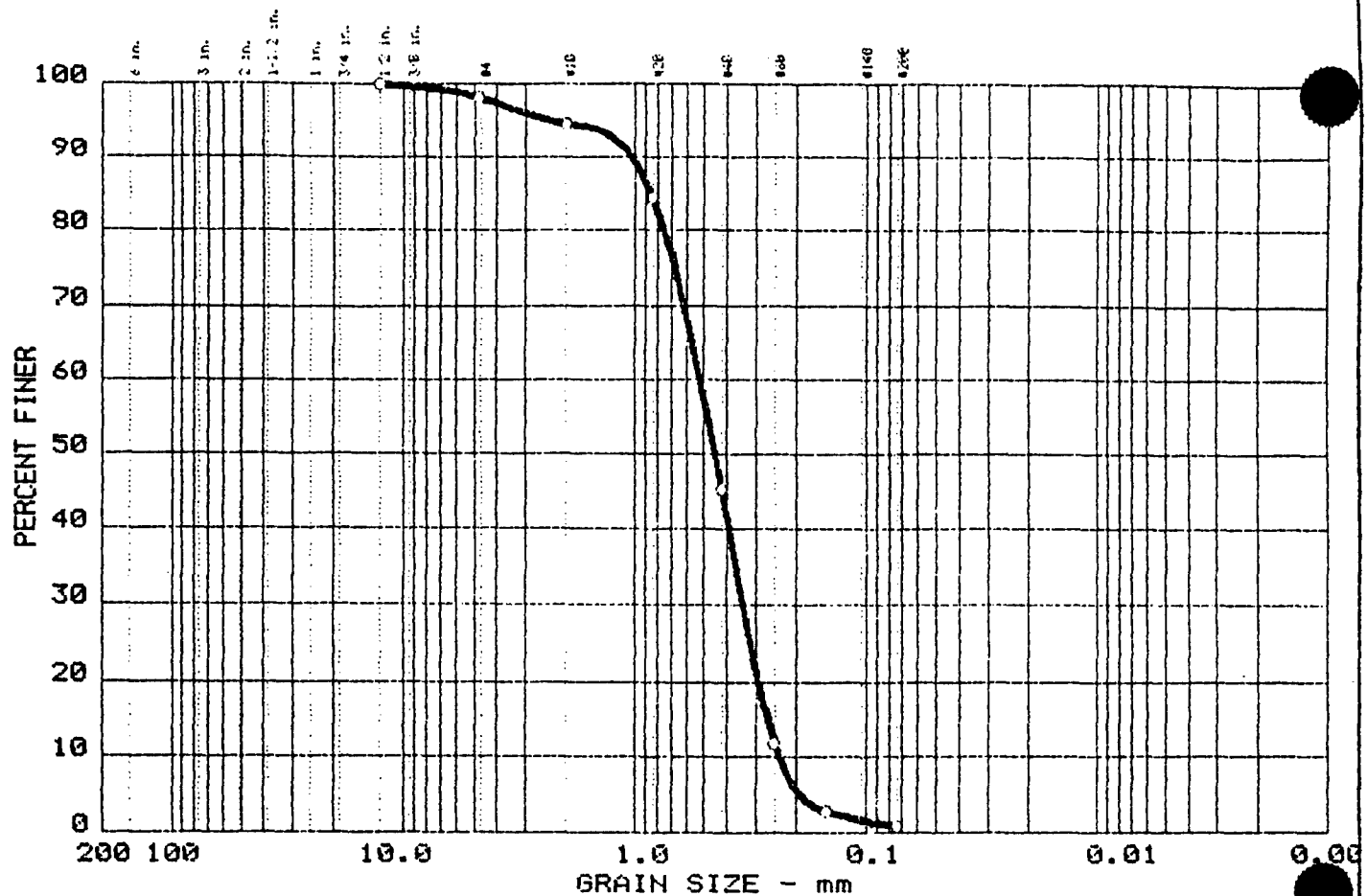
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. G6M-92-03X
 As rec'd w% = 20.6

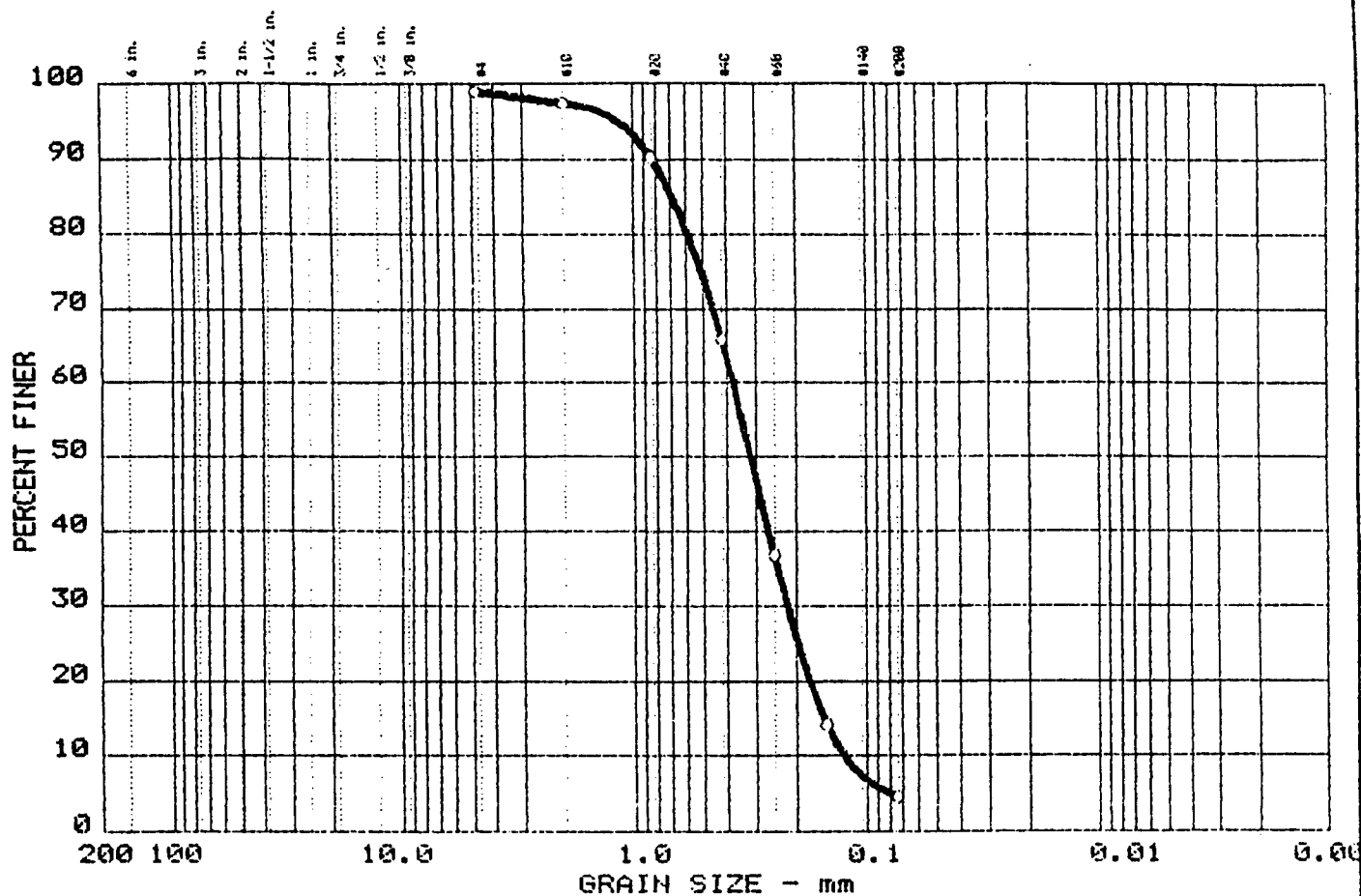
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GRAIN SIZE DISTRIBUTION TEST REPORT



GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	1.1	94.3	4.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.68	0.38	0.31	0.219	0.1529	0.1243	1.03	3.0

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

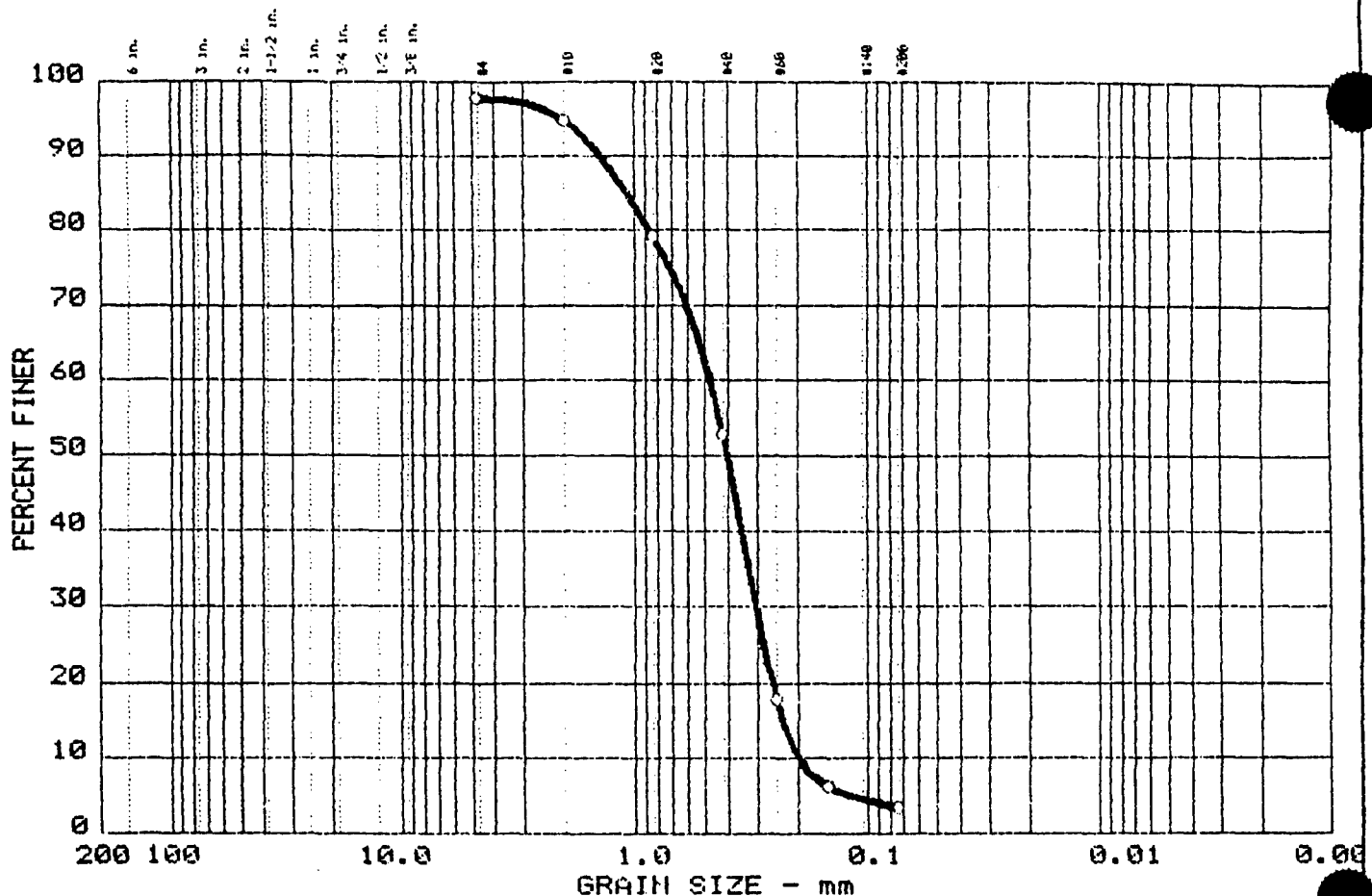
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BXG60562
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. G6M-92-05X
 As rec'd w% = 23.1

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	2.1	94.4	3.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.08	0.48	0.40	0.304	0.2342	0.1991	0.97	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
0 Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 Location: Field Sample I.D. BX6500508

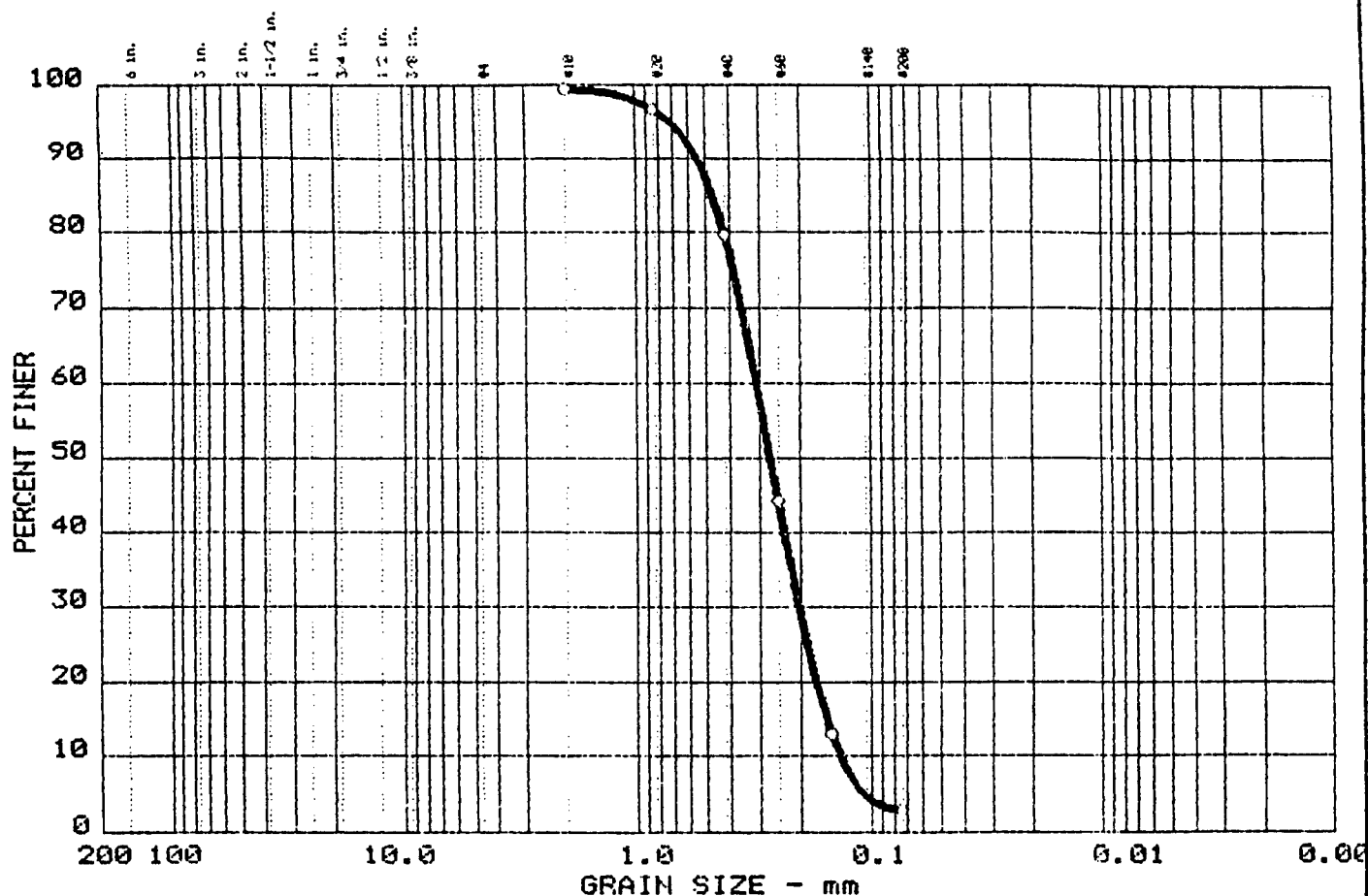
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 50B-92-05X
 As rec'd w% = 4.2

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	97.1	2.9

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.47	0.31	0.27	0.204	0.1561	0.1368	0.99	2.3

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BX660755

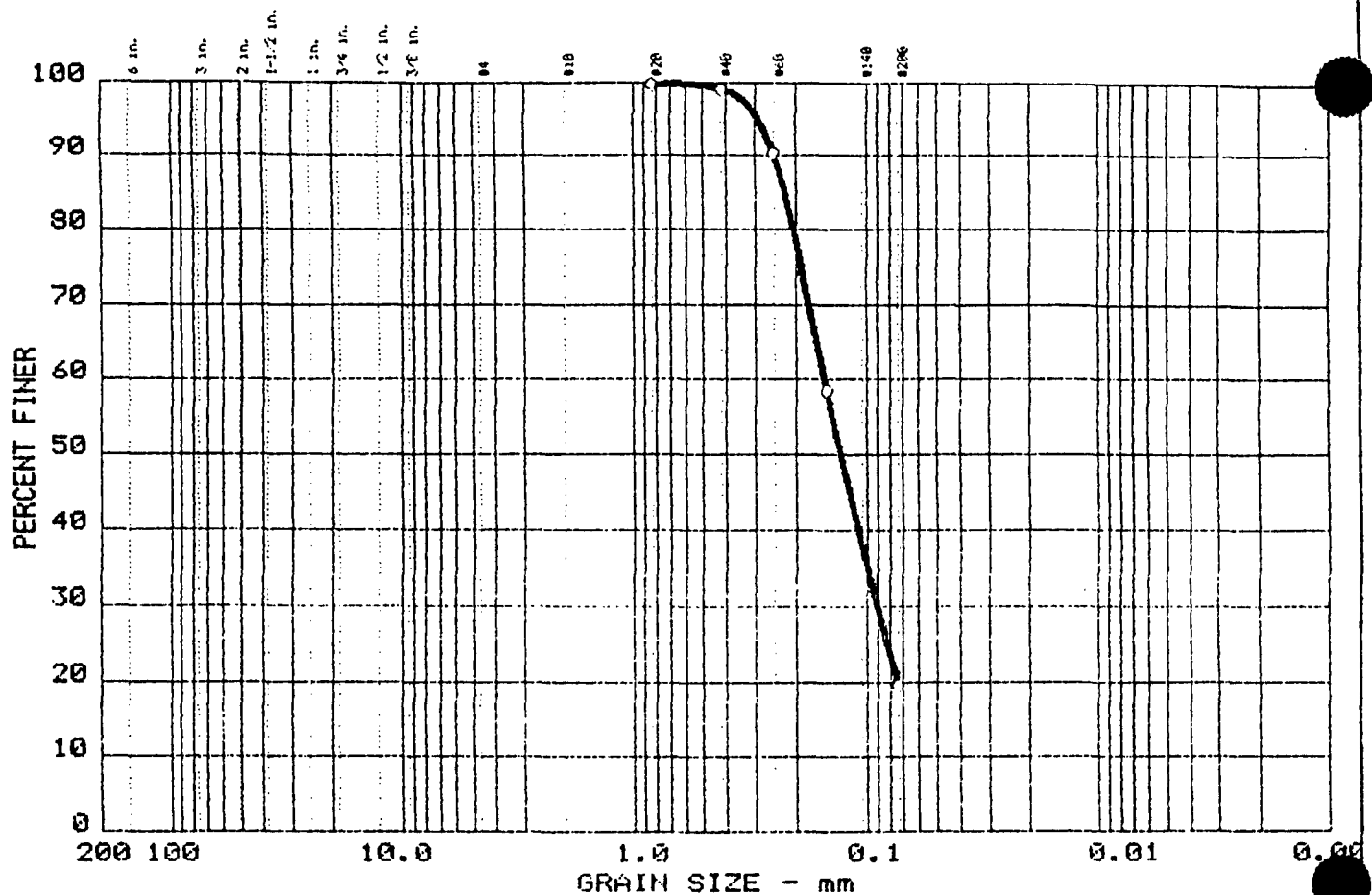
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 06M-92-07X
 As rec'd w% = 6.6

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

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GRAIN SIZE DISTRIBUTION TEST REPORT



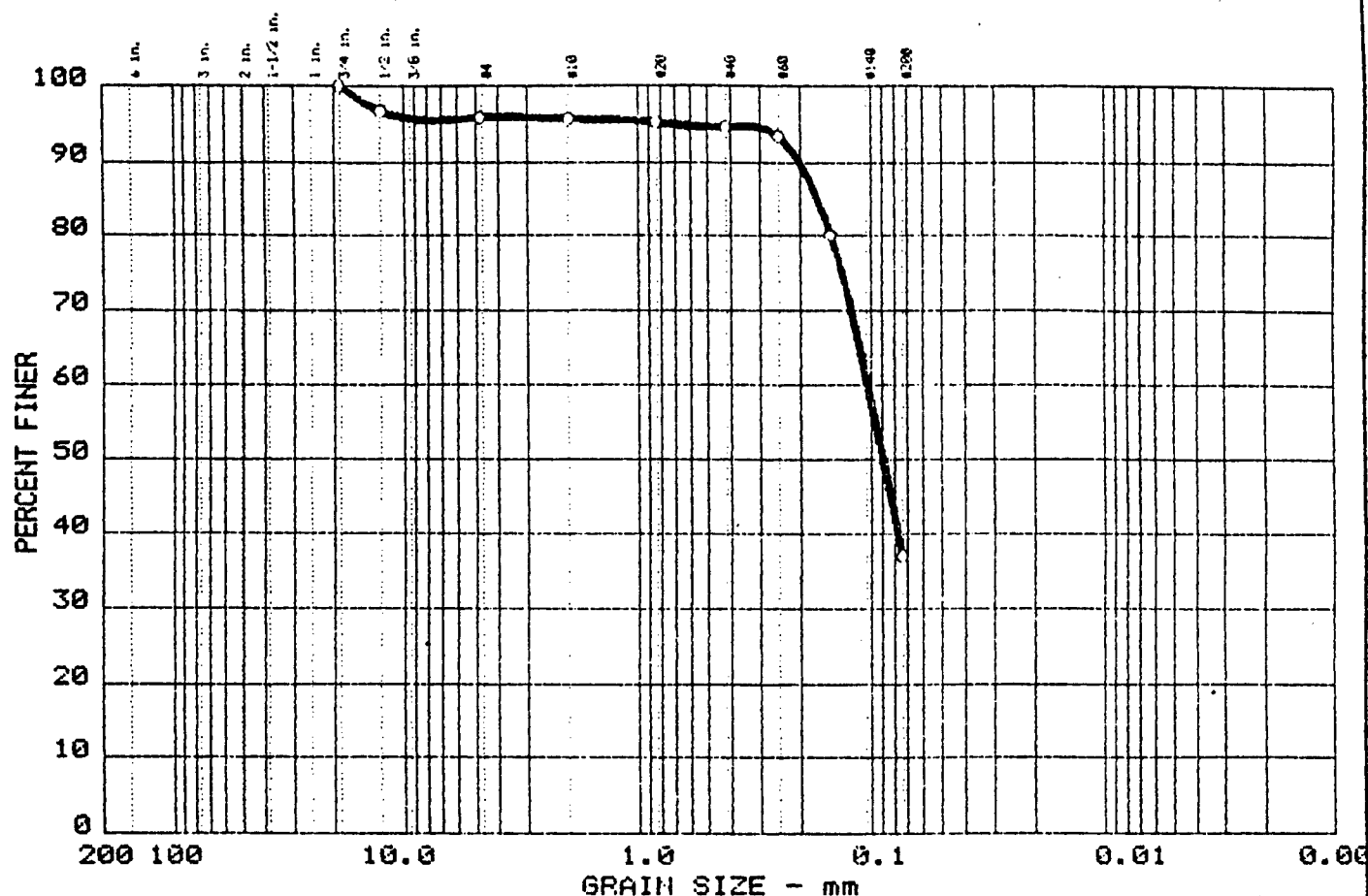
% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	88.5	19.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.22	0.15	0.13	0.091				

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND	SM	--

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 o Location: Field Sample I.D. - BXG60860 Date: July 15, 1992	Remarks: Wash Sieve Analysis Site I.D. G6M-92-08X As rec'd w% = 24.4
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GRAIN SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% FINES
0	0.0	4.2	58.9	36.9

	LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
0	--	--	0.17	0.10	0.09					

MATERIAL DESCRIPTION	USCS	AASHTO
0 Silty SAND	SM	--

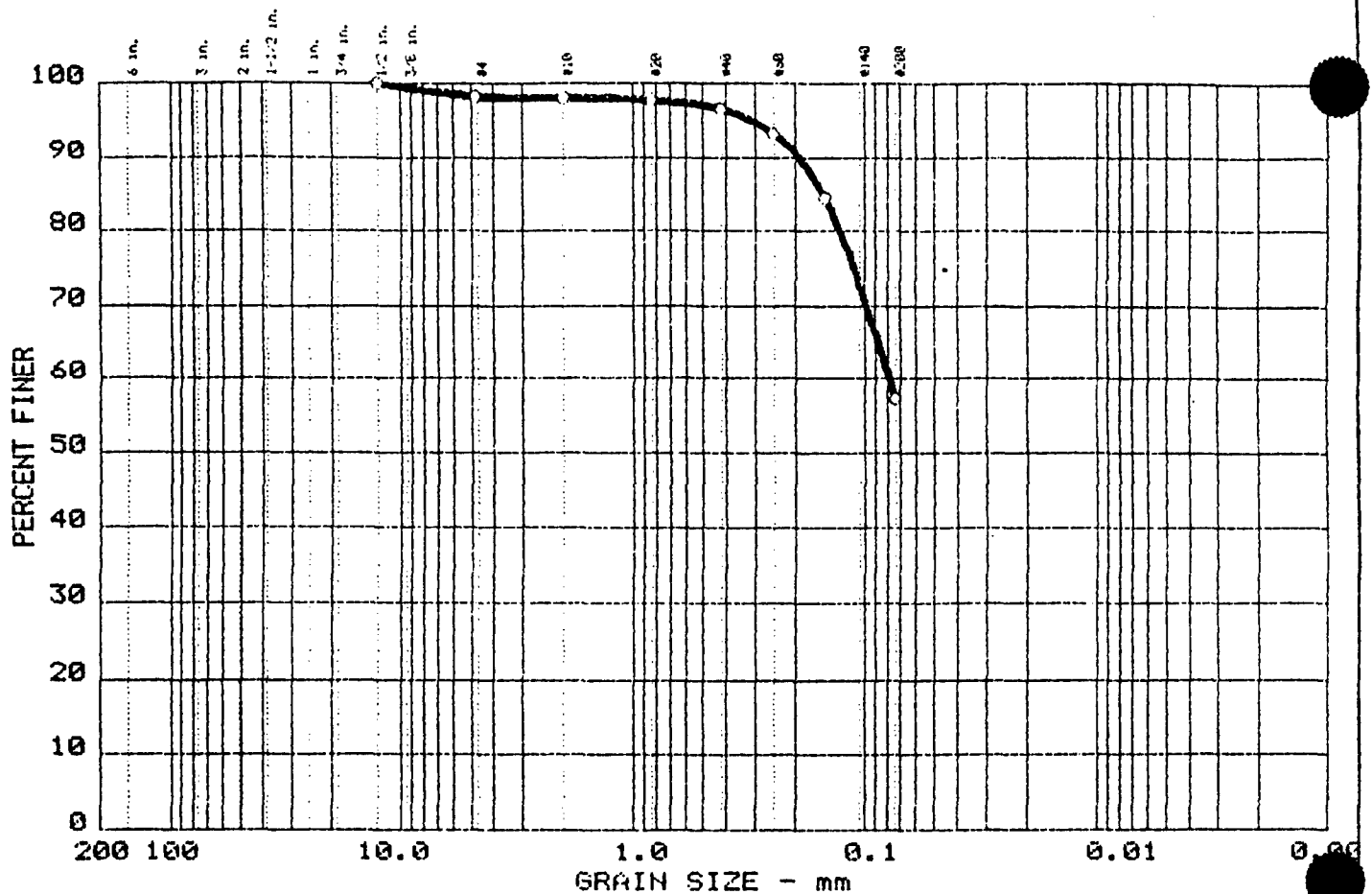
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 Location: Field Sample I.D. - BX500130
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 50B-92-01X
 As rec'd w% = 5.3

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	1.7	40.9	57.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.15	0.08						

MATERIAL DESCRIPTION	USCS	AASHTO
○ Sandy SILT	ML	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. BX061010

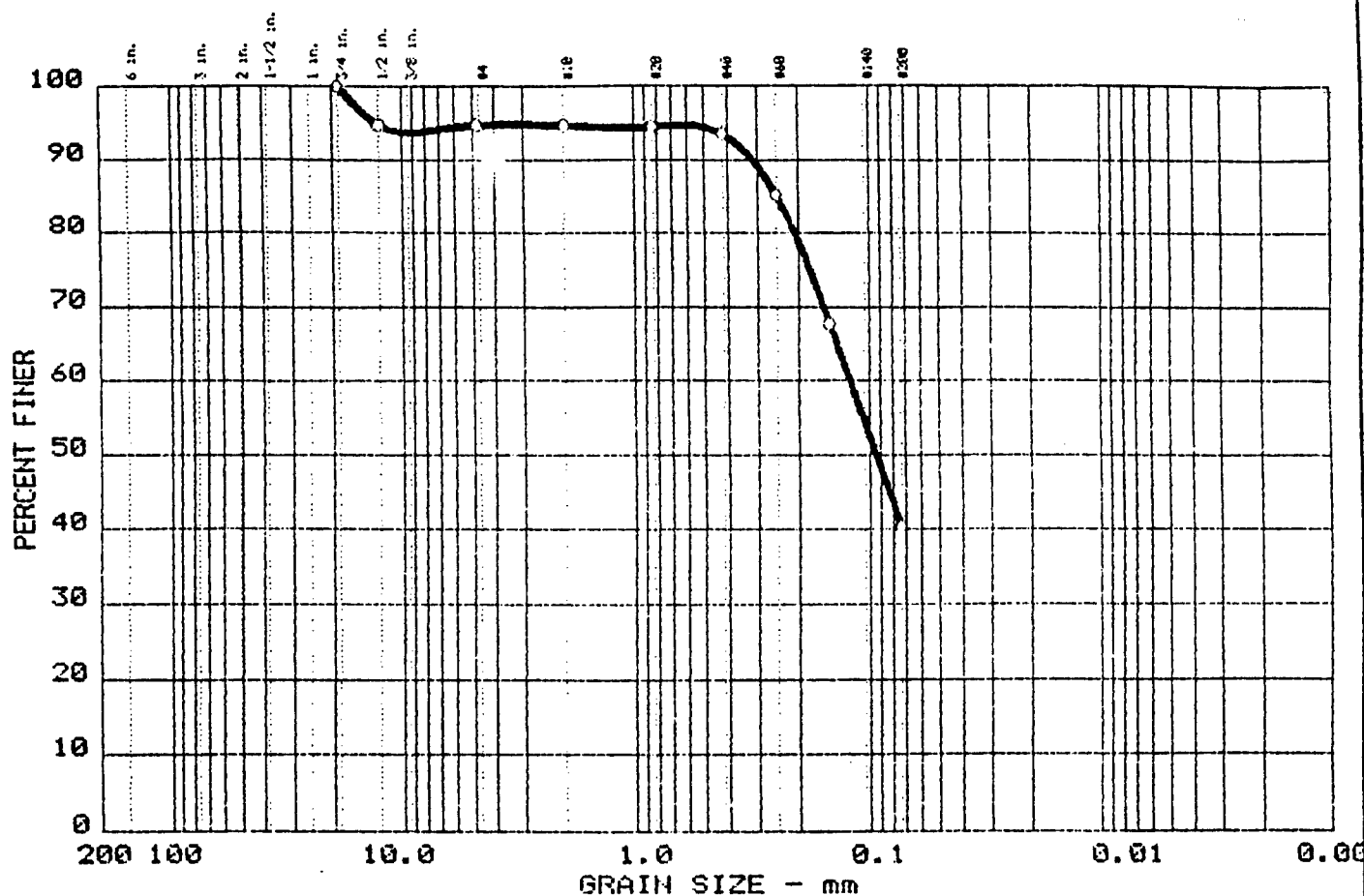
Date: July 15, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. G6M-92-10X
 As rec'd w% = 19.5

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	5.3	54.4	40.3

LL	PI	D ₃₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.25	0.12	0.09					

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. BXG61110

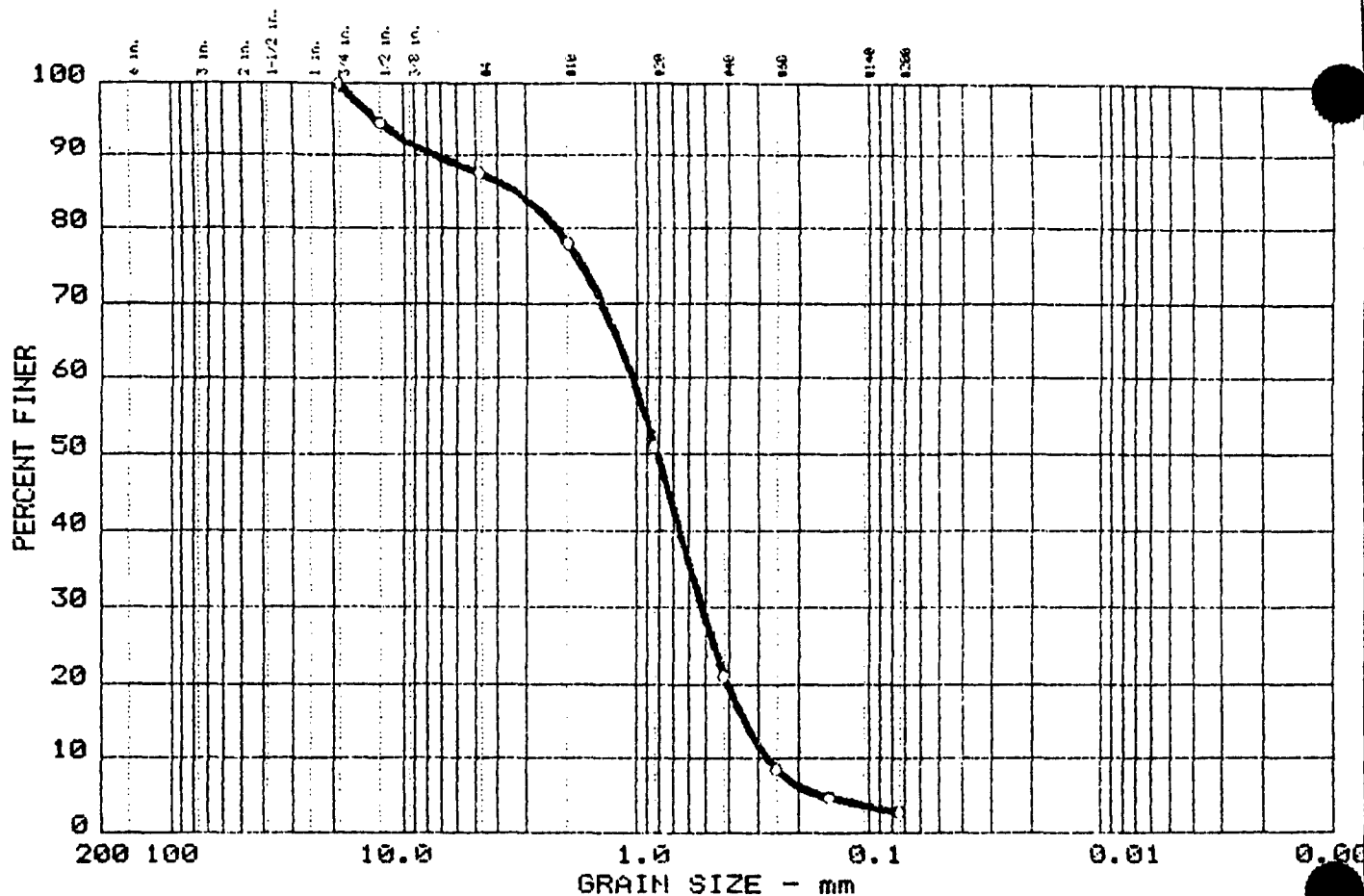
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. G6M-92-11X
 As rec'd w% = 12.9

GRAIN SIZE DISTRIBUTION TEST REPORT
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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	12.5	84.7	2.8

LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
--	--	3.35	1.05	0.82	0.525	0.3432	0.2726	0.96	3.9

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 Location: Field Sample I.D. - BX440105

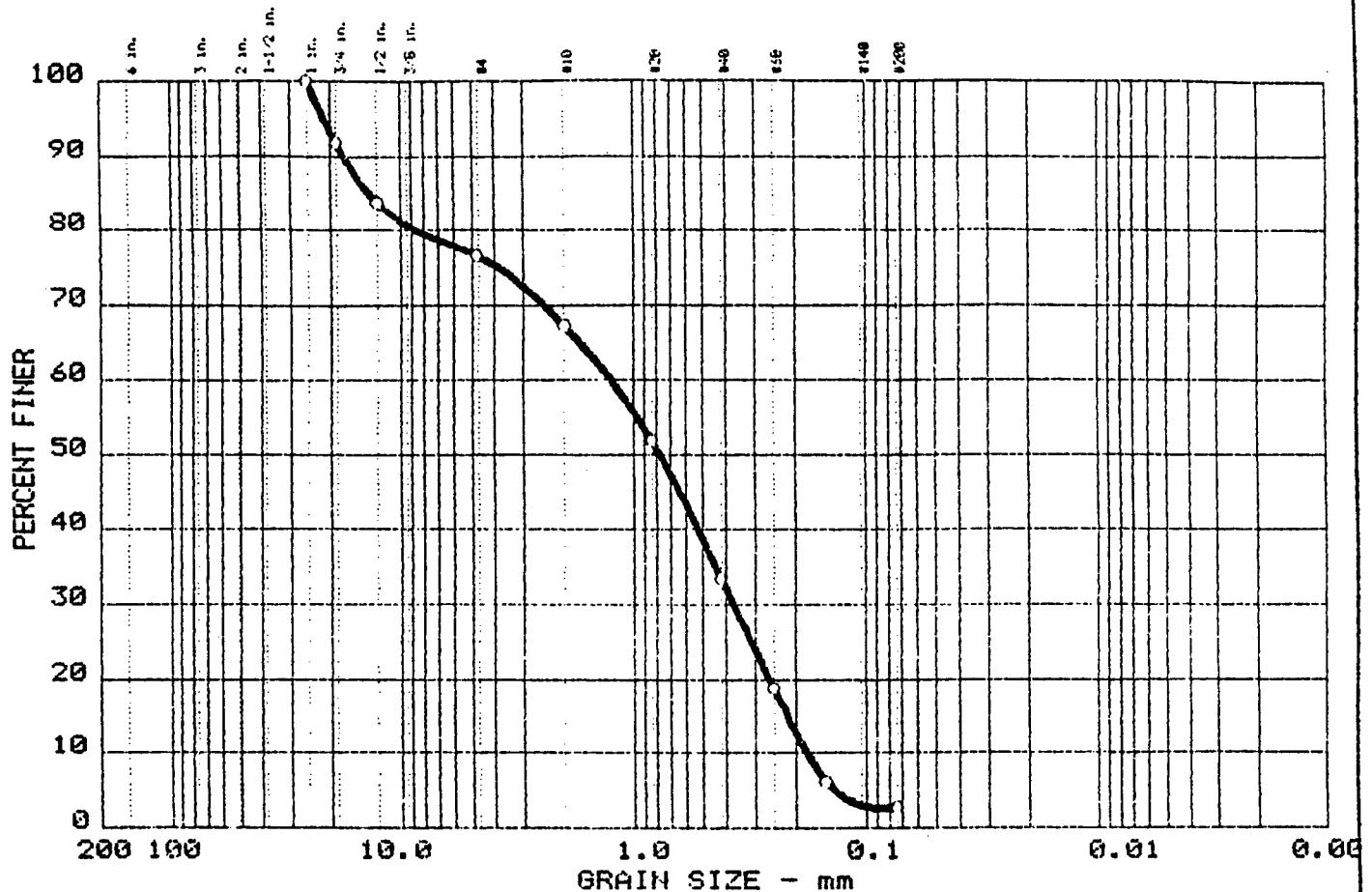
Date: July 15, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. 44B-92-01X
 As rec'd w% = 3.5

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	23.4	73.8	2.8

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	13.65	1.24	0.77	0.370	0.2180	0.1793	0.61	6.9

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND with Gravel	SP	--

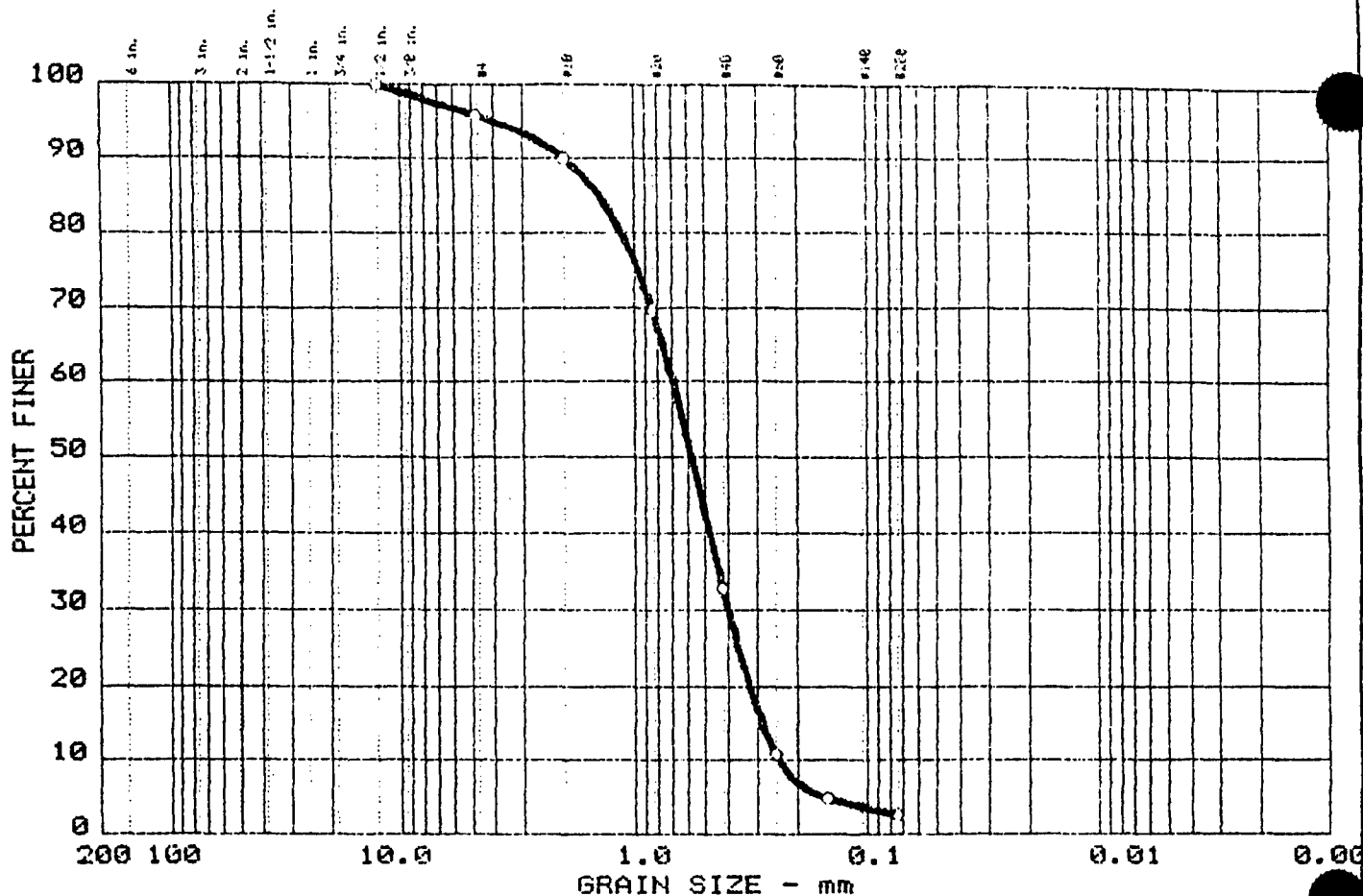
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BX440410
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 44B-92-04X
 As rec'd w% = 3.9

GRAIN SIZE DISTRIBUTION TEST REPORT
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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	4.2	93.2	2.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.41	0.68	0.57	0.398	0.2848	0.2396	0.96	2.9

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

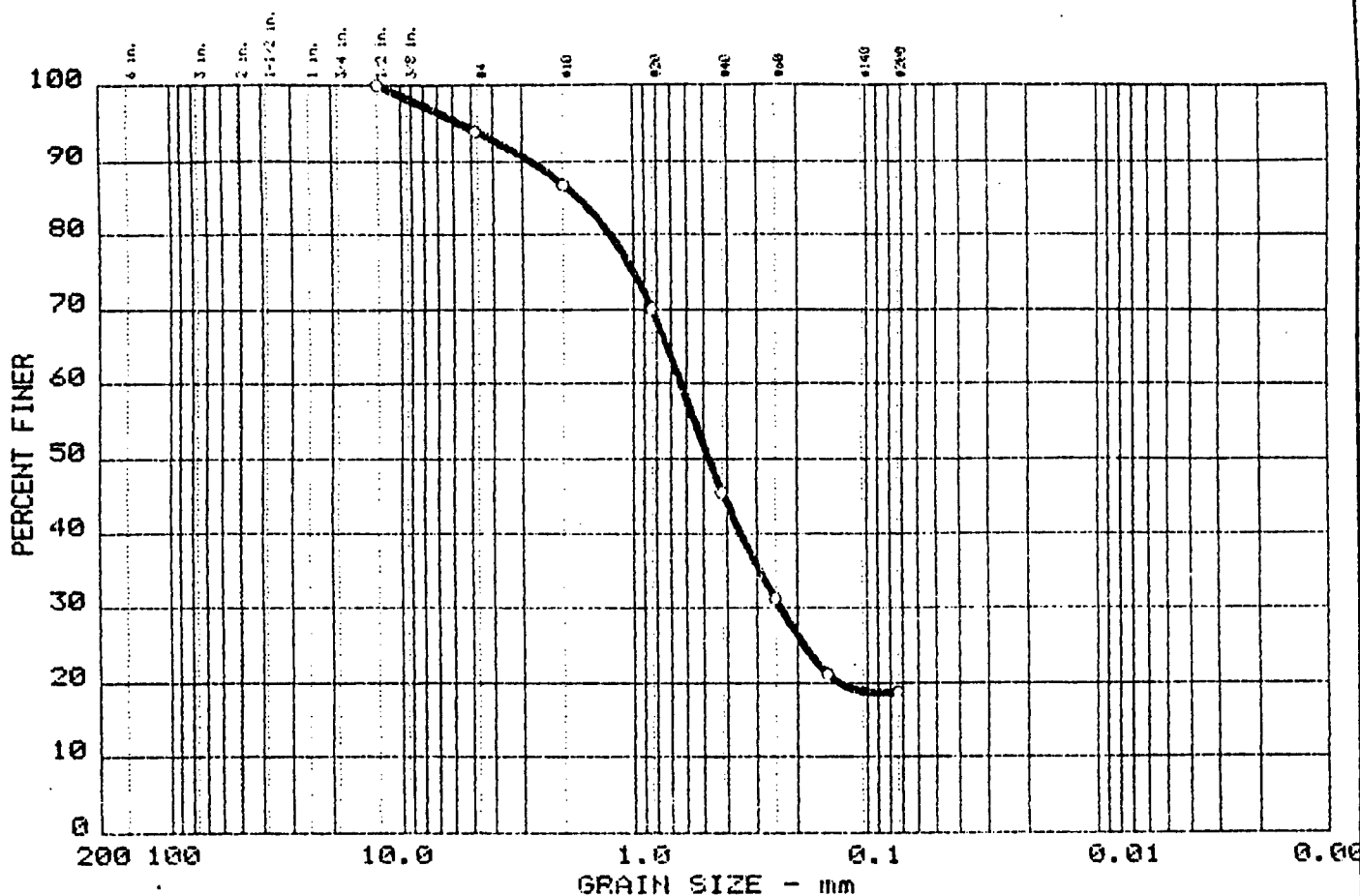
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 Location: Field Sample I.D. - BX520305
 Date: July 15, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 52B-92-03X
 As rec'd w% = 3.1

GRAIN SIZE DISTRIBUTION TEST REPORT
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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	6.0	75.3	18.7

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.72	0.62	0.48	0.236				

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. - DX520502

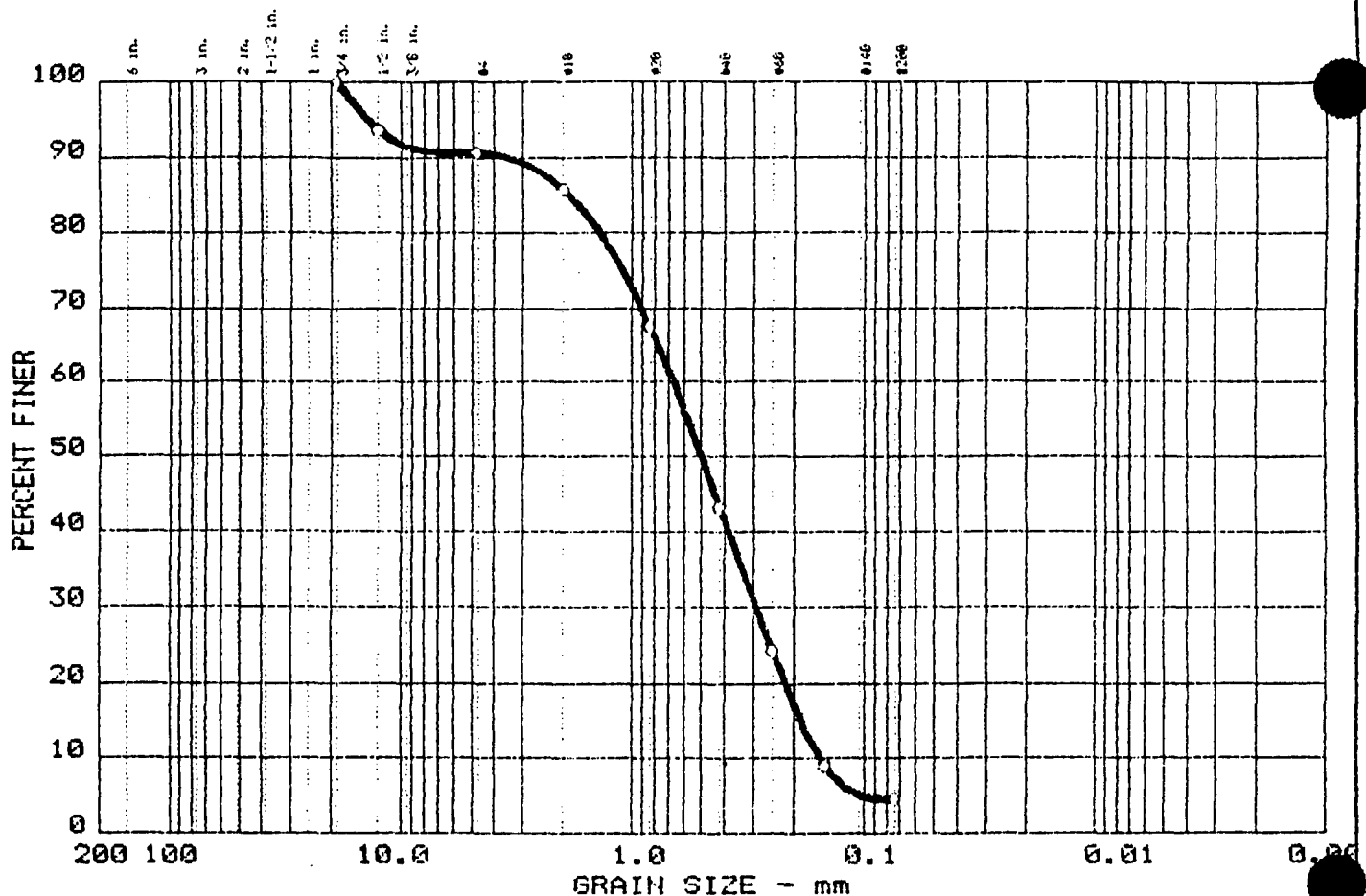
 Date: July 17, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 52B-92-05X
 As rec'd w% = 4.8

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	9.4	86.2	4.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.88	0.67	0.50	0.293	0.1886	0.1551	0.83	4.3

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. - BX520905

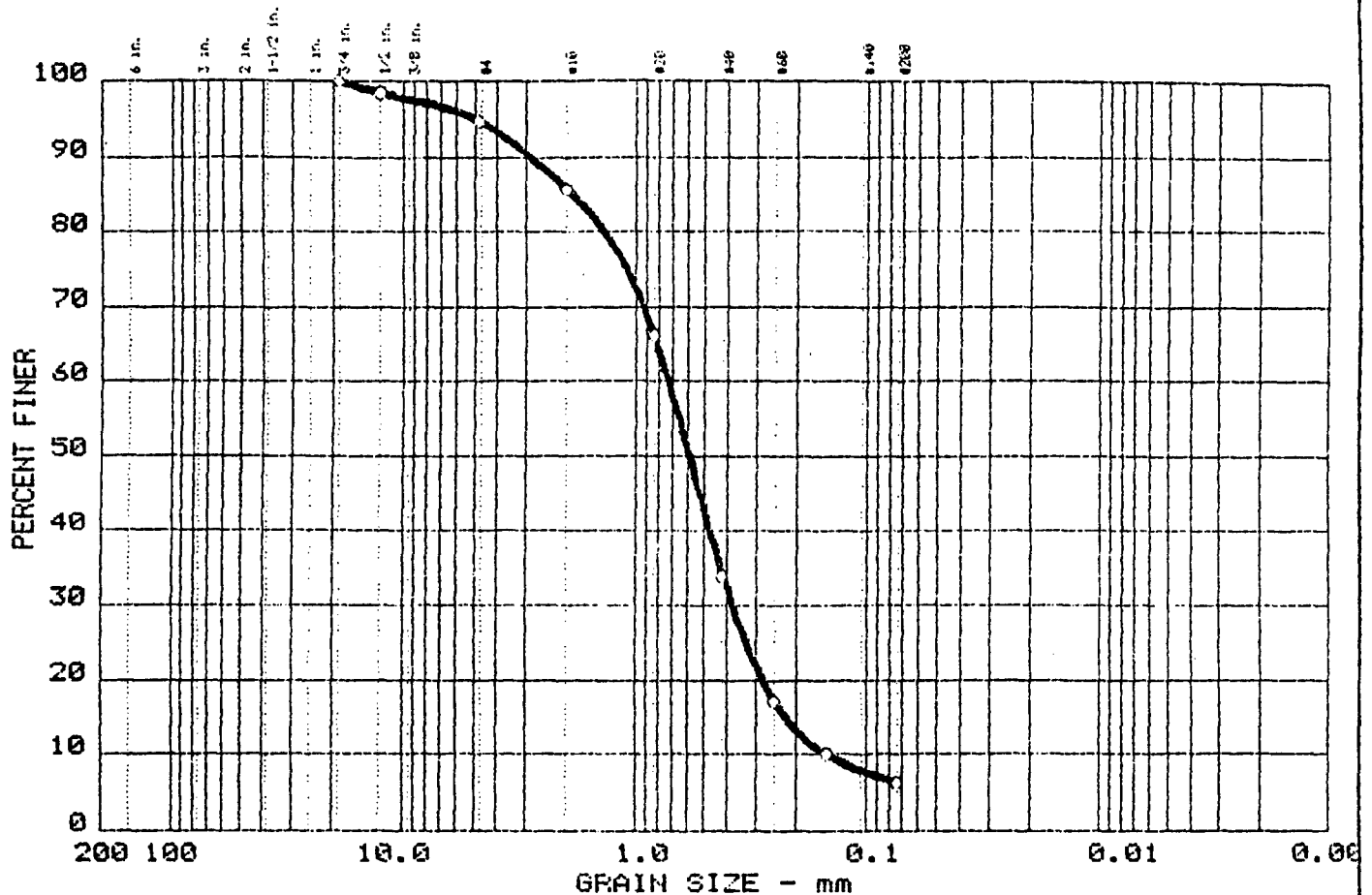
Date: July 17, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. 52B-92-09X
 As rec'd w% = 4.2

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GRAIN SIZE DISTRIBUTION TEST REPORT



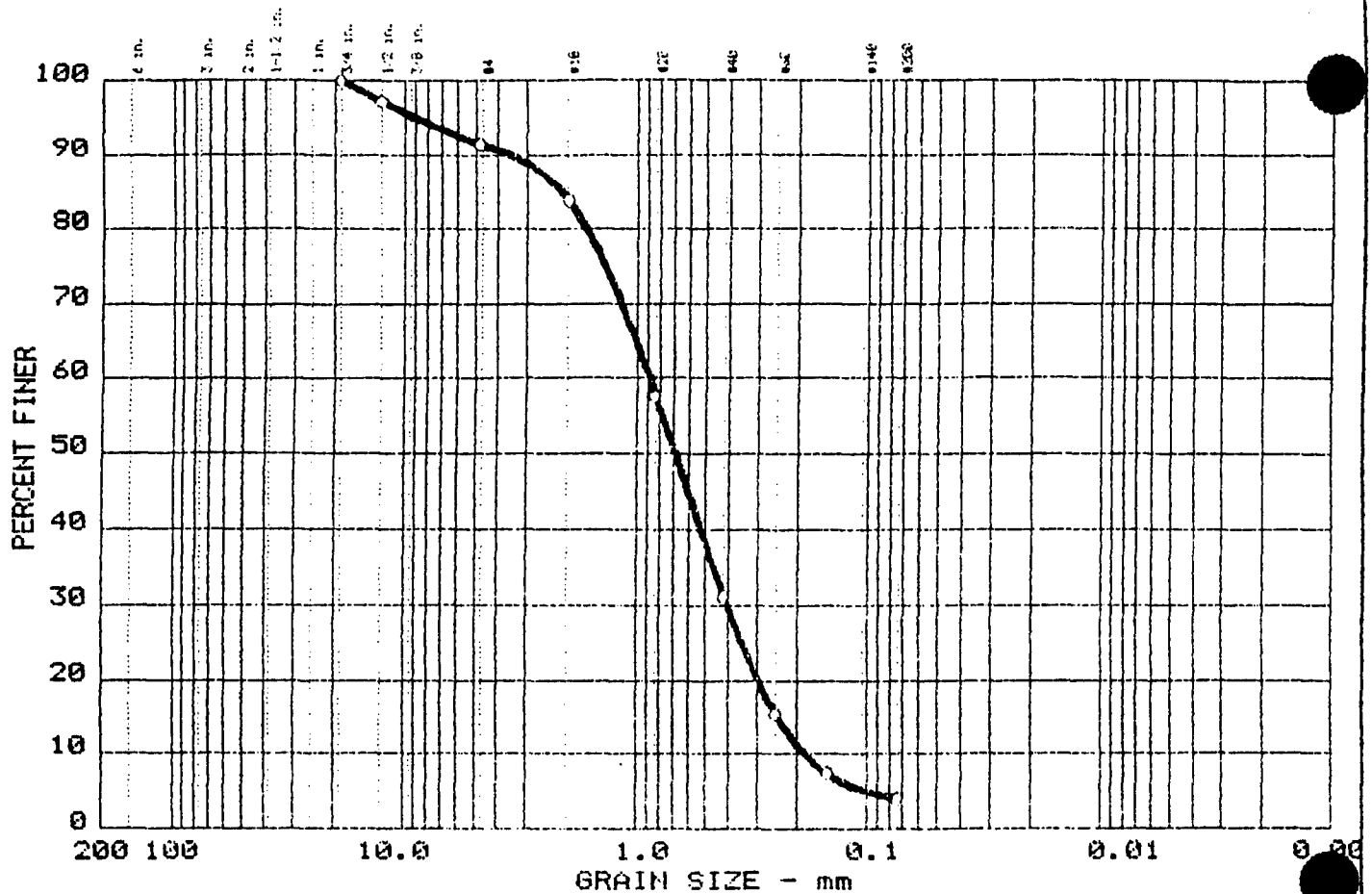
% +3"	% GRAVEL	% SAND	% FINES
0.0	5.3	88.4	6.3

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.88	0.72	0.59	0.382	0.2226	0.1471	1.37	4.9

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND with Silt	SP-SM	--

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 ○ Location: Field Sample I.D. - BX300102 Date: July 17, 1992	Remarks: Wash Sieve Analysis Site I.D. 30B-92-01X As rec'd w% = 5.4
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	CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	8.5	87.4	4.1

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	2.11	0.89	0.68	0.406	0.2446	0.1834	1.01	4.9

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

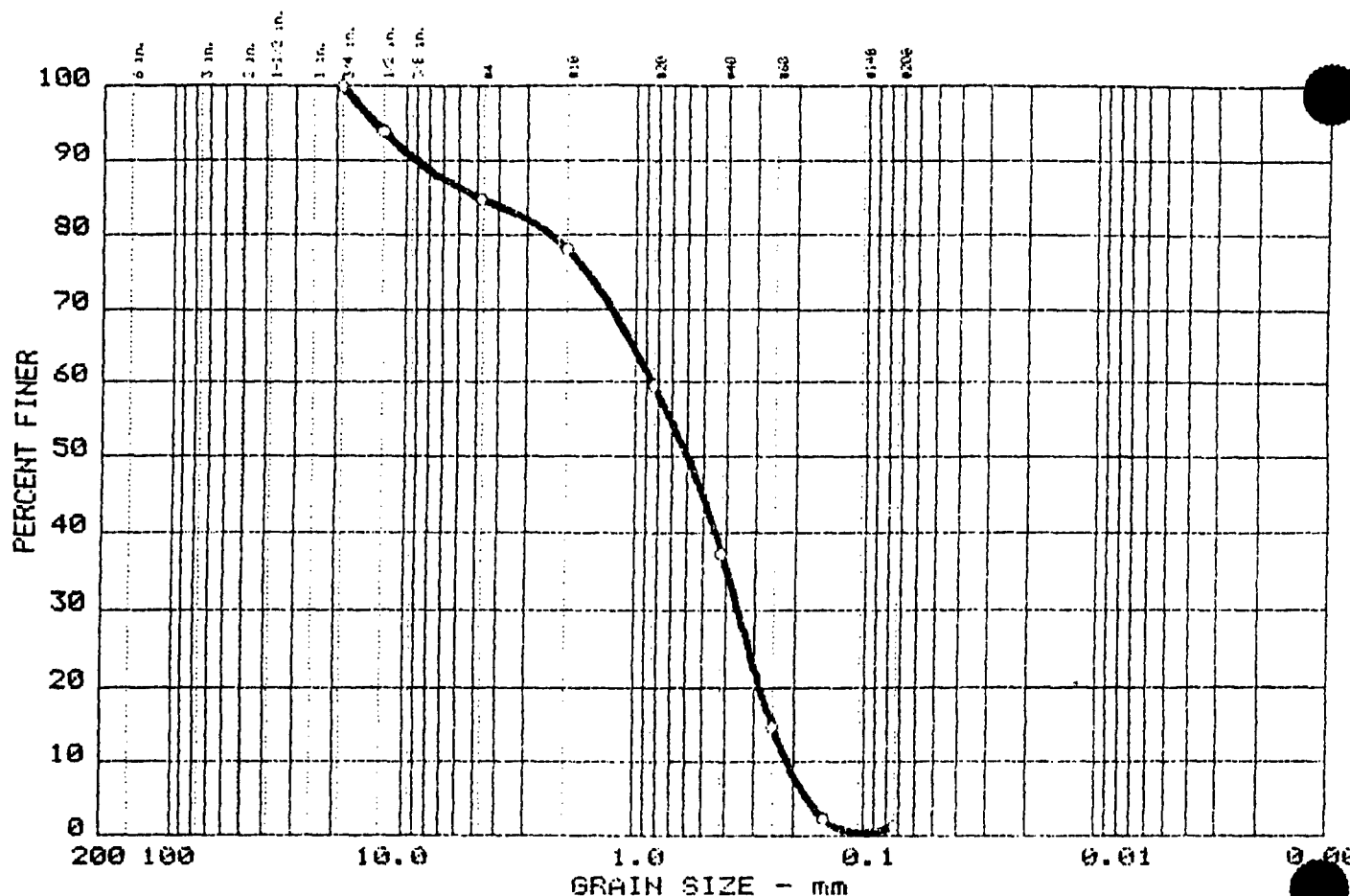
<p>Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 ○ Location: Field Sample I.D. - BX300504</p> <p>Date: July 17, 1992</p> <p style="text-align: center;">GRAIN SIZE DISTRIBUTION TEST REPORT CIVILTEST LABORATORIES, INC.</p>	<p>Remarks: Wash Sieve Analysis Site I.D. 30B-92-05X As rec'd w% = 4.2</p> <p style="text-align: right;">CT - 3092</p>
--	---

Grain size distribution curve for a soil sample. The Y-axis represents Percent Finer (0 to 100), and the X-axis represents Grain Size in mm (logarithmic scale from 200 to 0.075). The curve shows a well-graded soil with a D50 of approximately 0.425 mm.

Grain Size (mm)	Percent Finer (%)
2.0	100
1.0	85
0.75	75
0.6	65
0.425	50
0.3	40
0.25	30
0.2	20
0.15	10
0.125	5
0.1	3

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 Location: Field Sample I.D. - BX300702 Date: July 17, 1992	Remarks: Wash Sieve Analysis Site I.D. 30B-92-07X As rec'd W% = 6.5
GRAIN SIZE DISTRIBUTION TEST REPORT CIVILTEST LABORATORIES, INC.	
CT - 3092	

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	15.2	83.6	1.2

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	4.84	0.85	0.60	0.356	0.2500	0.2152	0.69	4.0

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND with Gravel	SP	--

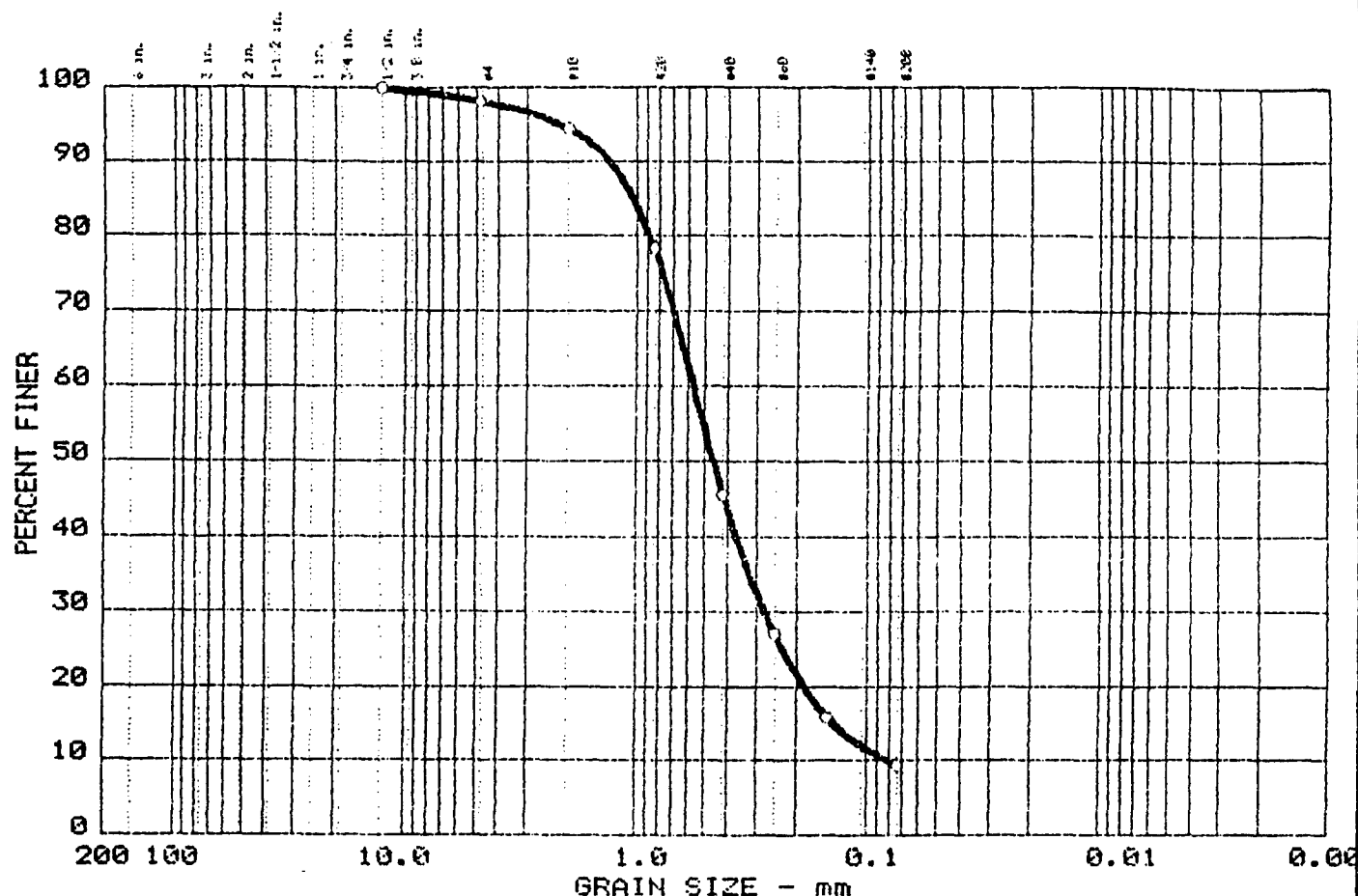
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. - BX300806
 Date: July 17, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 30B-92-08X
 As rec'd w% = 4.9

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	1.9	89.7	9.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.04	0.56	0.46	0.275	0.1393	0.0802	1.67	7.0

MATERIAL DESCRIPTION	USCS	AASHTO
Well Graded SAND with Silt	SW-SM	--

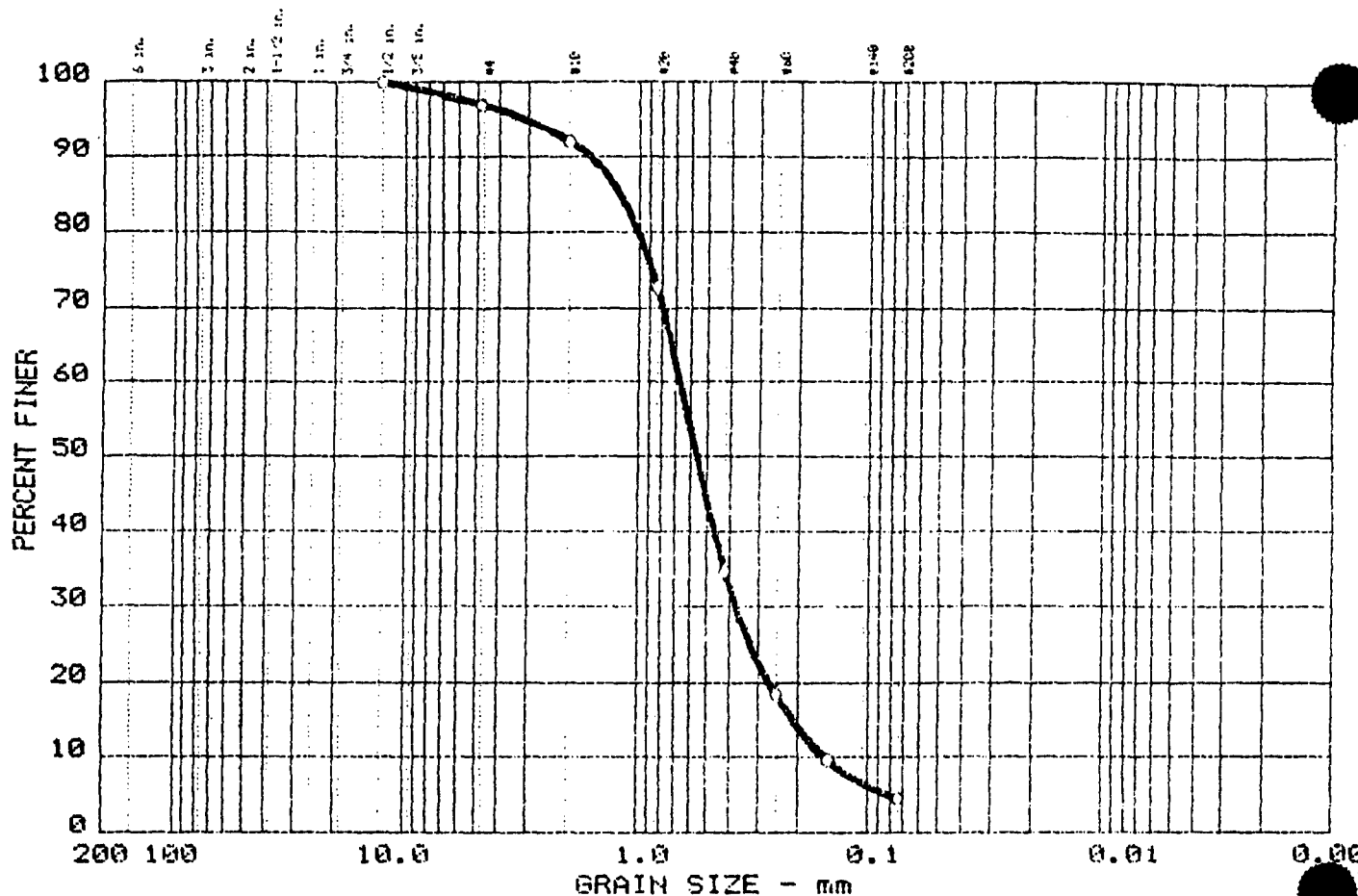
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 Location: Field Sample I.D. - BX310202
 Date: July 17, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 31B-92-02X
 As rec'd w% = 9.7

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	3.0	92.4	4.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.20	0.66	0.56	0.375	0.2109	0.1528	1.40	4.3

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 o Location: Field Sample I.D. - BX310510

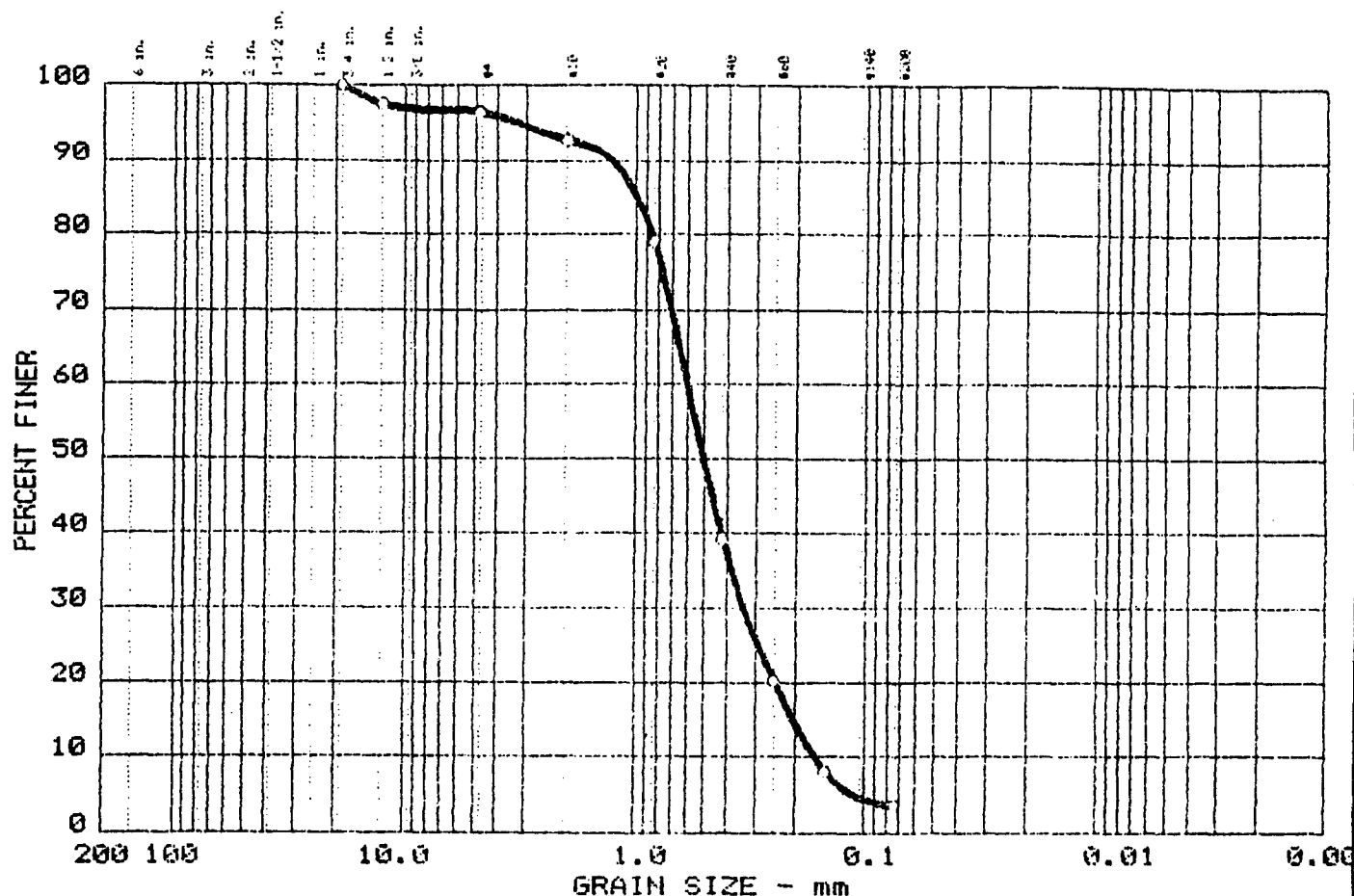
Date: July 17, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. 31B-92-05X
 As rec'd W% = 4.3

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



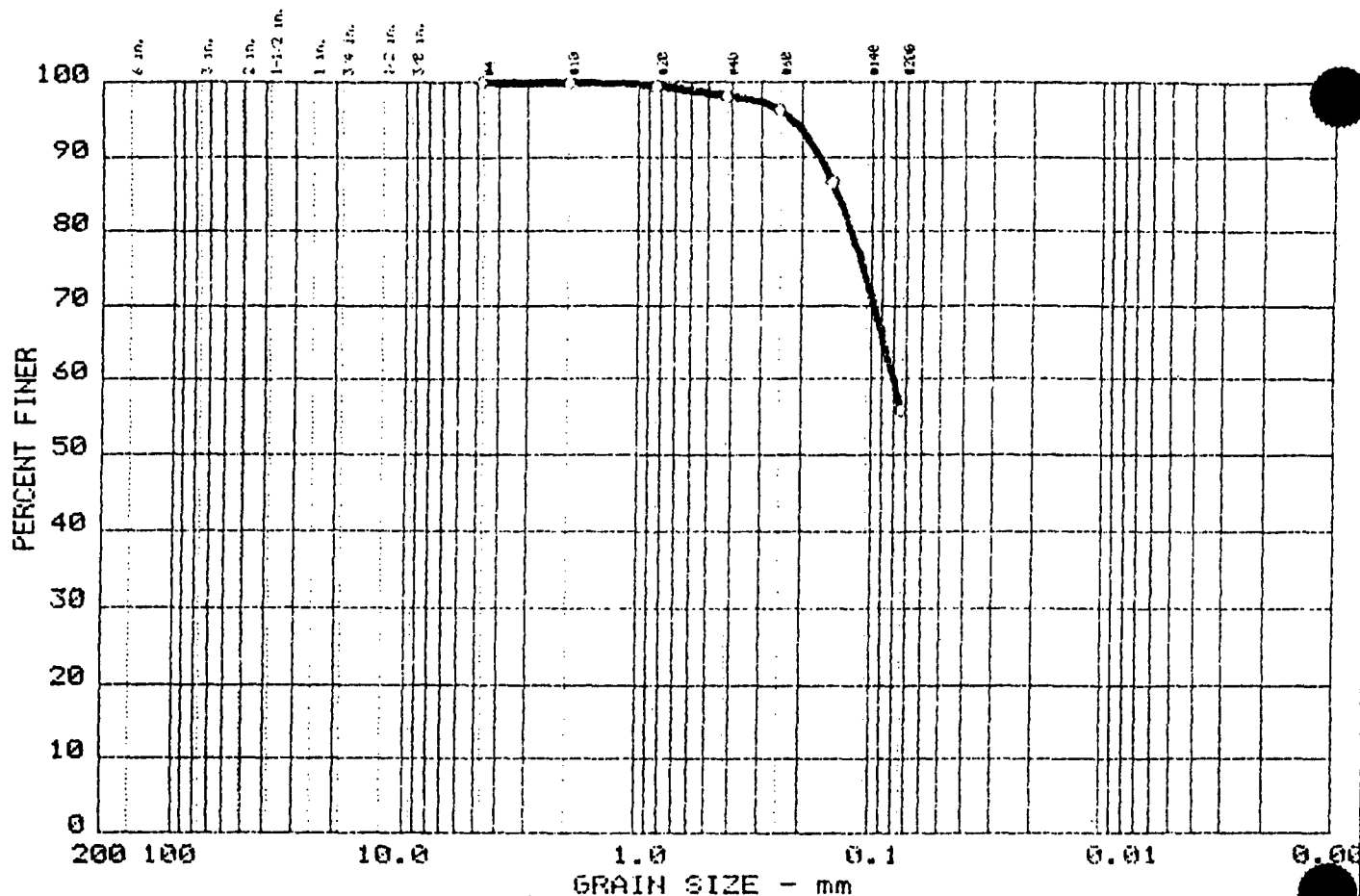
% +3"	% GRAVEL	% SAND	% FINES
0.0	3.5	93.0	3.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.99	0.60	0.51	0.339	0.2058	0.1652	1.17	3.6

MATERIAL DESCRIPTION	USCS	AASHTO
0 Poorly Graded SAND	SP	--

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 Location: Field Sample I.D. - BX310555 Date: July 17, 1992	Remarks: Wash Sieve Analysis Site I.D. 31B-92-05X As rec'd w% = 2.9
GRAIN SIZE DISTRIBUTION TEST REPORT CIVILTEST LABORATORIES, INC.	
CT - 3092	

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	44.0	56.0

LL	PI	N_{65}	D_{60}	N_{50}	N_{30}	D_{15}	D_{10}	C_c	C_u
--	--	0.14	0.08						

MATERIAL DESCRIPTION	USCS	AASHTO
○ Sandy SILT	MIL	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 Location: Field Sample I.D. - BX500306

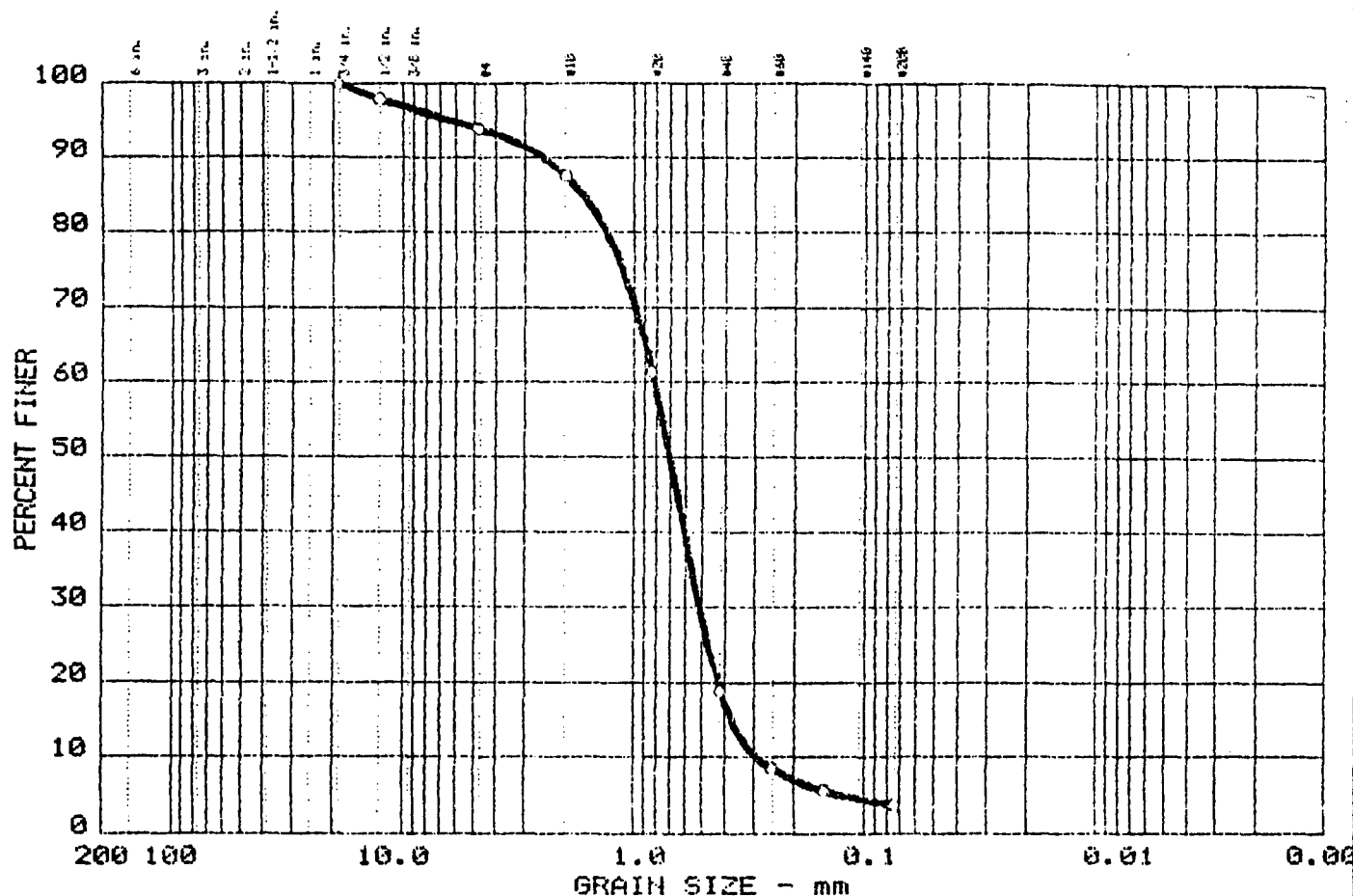
Date: July 17, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. 50B-92-03X
 As rec'd w% = 4.0

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



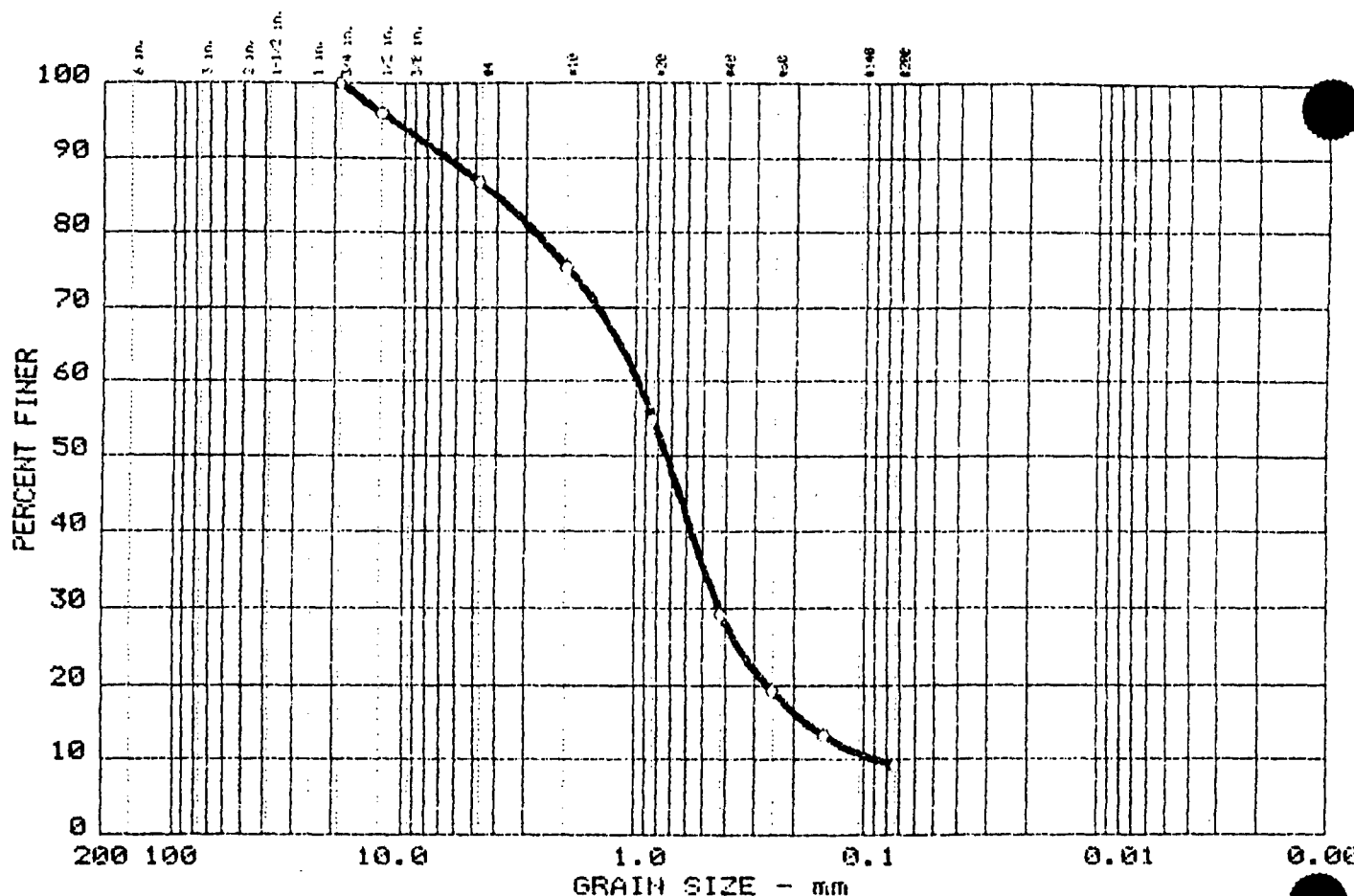
% +3"	% GRAVEL	% SAND	% FINES
0.0	6.1	90.1	3.8

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.68	0.82	0.70	0.518	0.3754	0.2914	1.12	2.8

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	--

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 ○ Location: Field Sample I.D. - BX500207 Date: July 17, 1992	Remarks: Wash Sieve Analysis Site I.D. 50B-92-02X As rec'd w% = 3.5
GRAIN SIZE DISTRIBUTION TEST REPORT CIVILTEST LABORATORIES, INC.	
CT - 3092	

GRAIN SIZE DISTRIBUTION TEST REPORT



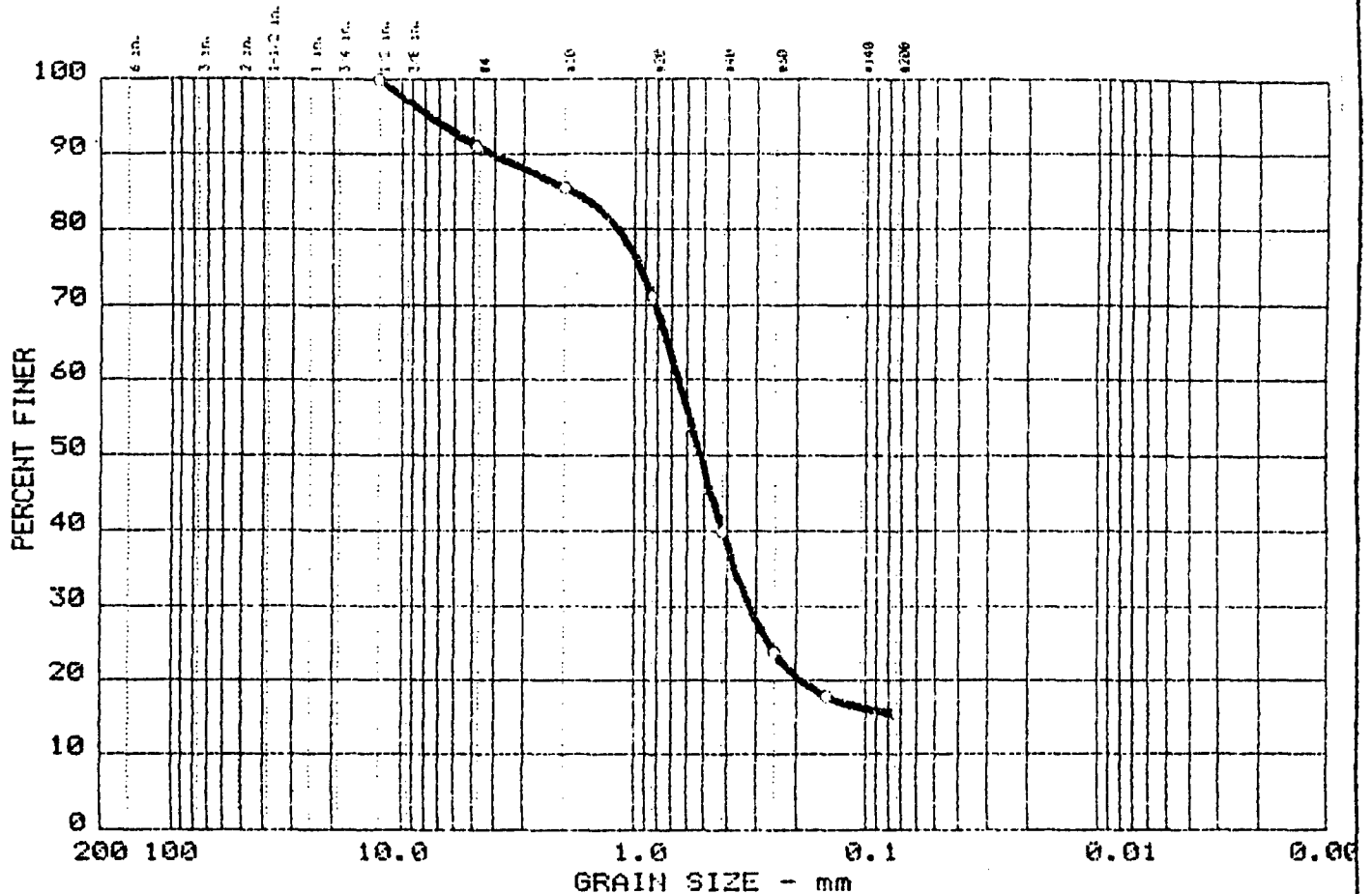
% +3"	% GRAVEL	% SAND	% FINES
0.0	13.2	77.6	9.2

LL	PI	I ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	4.03	0.98	0.73	0.430	0.1752	0.0878	2.16	11.1

MATERIAL DESCRIPTION	USCS	AASHTO
Well-Graded SAND with Silt	SW-SM	--

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6 Location: Field Sample I.D. - BX500101 Date: July 17, 1992	Remarks: Wash Sieve Analysis Site I.D. 50B-92-01X As rec'd w% = 3.2
GRAIN SIZE DISTRIBUTION TEST REPORT CIVILTEST LABORATORIES, INC.	
CT - 3092	

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	9.0	75.6	15.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.84	0.64	0.52	0.319				

MATERIAL DESCRIPTION	USCS	AASHTO
○ Silty SAND	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - BX500705

 Date: July 17, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. 50B-92-07X
 As rec'd w% = 20.2

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

CT - 3092

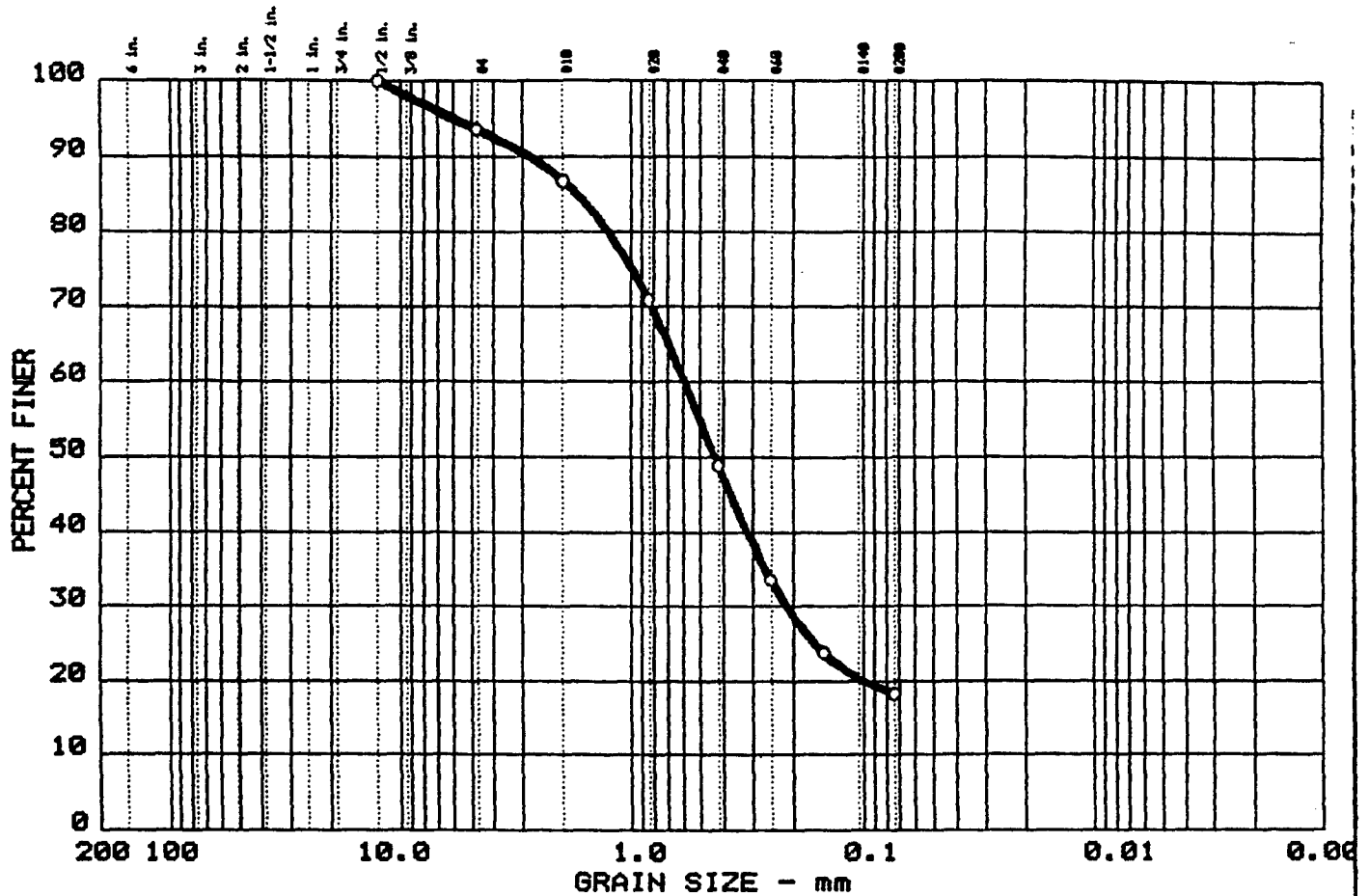
Grain size distribution curve for sample 100-100. The graph plots Percent Finer (0 to 100) against Grain Size in mm (200 to 0.0075). The curve shows a sharp drop from 100% finer at 0.075 mm to approximately 75% finer at 0.06 mm, indicating a fine sand or silt material.

[illegible]

Project No.: 06917.04	Remarks:
Project: USATHAMA - FORT DEVENS GI/RI GROUP 3,5,6	Wash Sieve Analysis
Location: Field Sample I.D. - BX501010	Site I.D. 50B-92-10X
	As rec'd w% = 21.8
Date: July 17, 1992	

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% FINES
0	0.0	6.4	75.4	18.2

	LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
0	--	--	1.72	0.59	0.43	0.213				

MATERIAL DESCRIPTION	USCS	AASHTO
0 Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 0 Location: Field Sample I.D. - DX090100

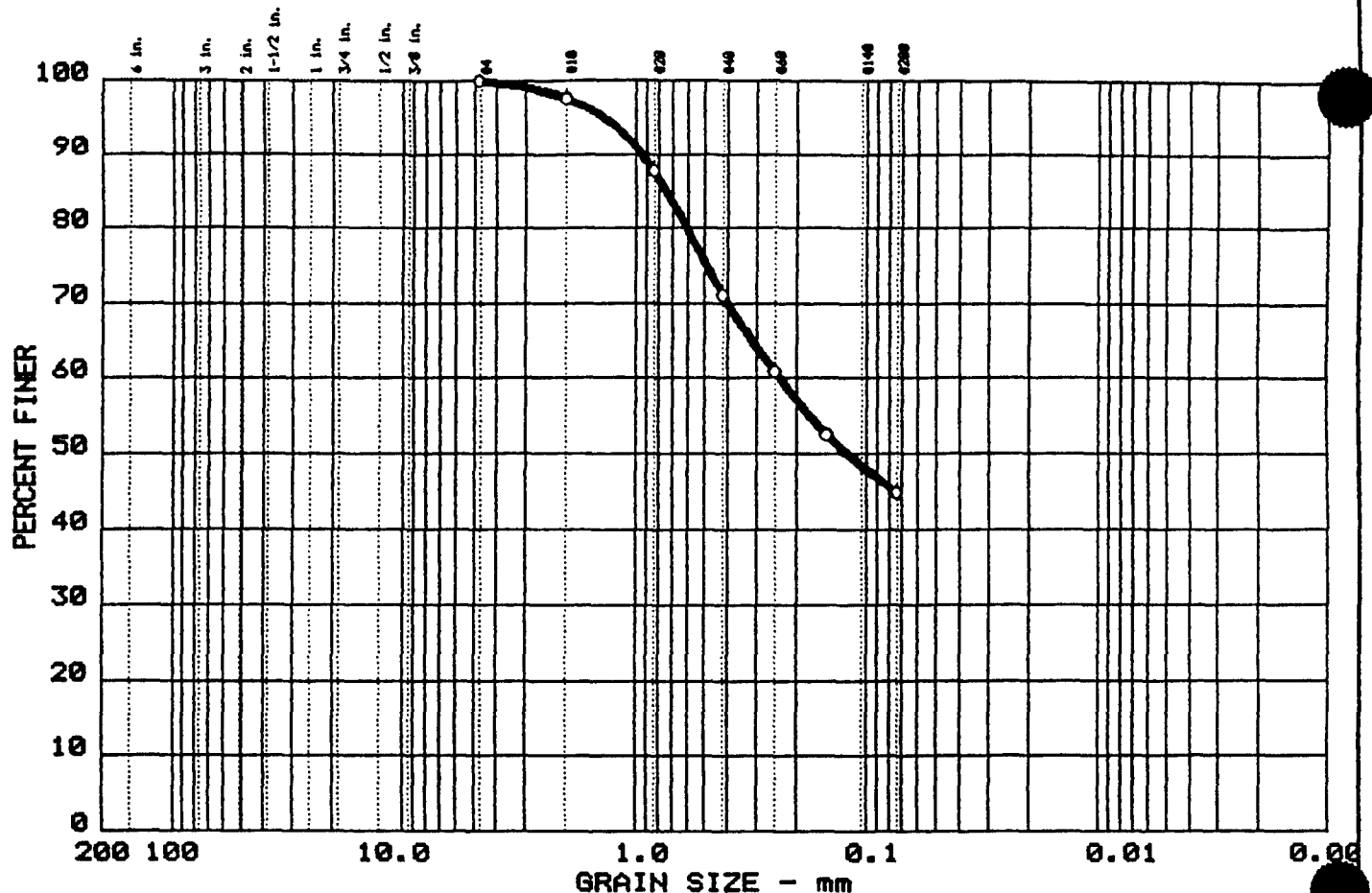
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 09D-92-01X
 As rec'd w% = 51.85
 little Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	55.1	44.9

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.74	0.24	0.12					

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 o Location: Field Sample I.D. - DX090200

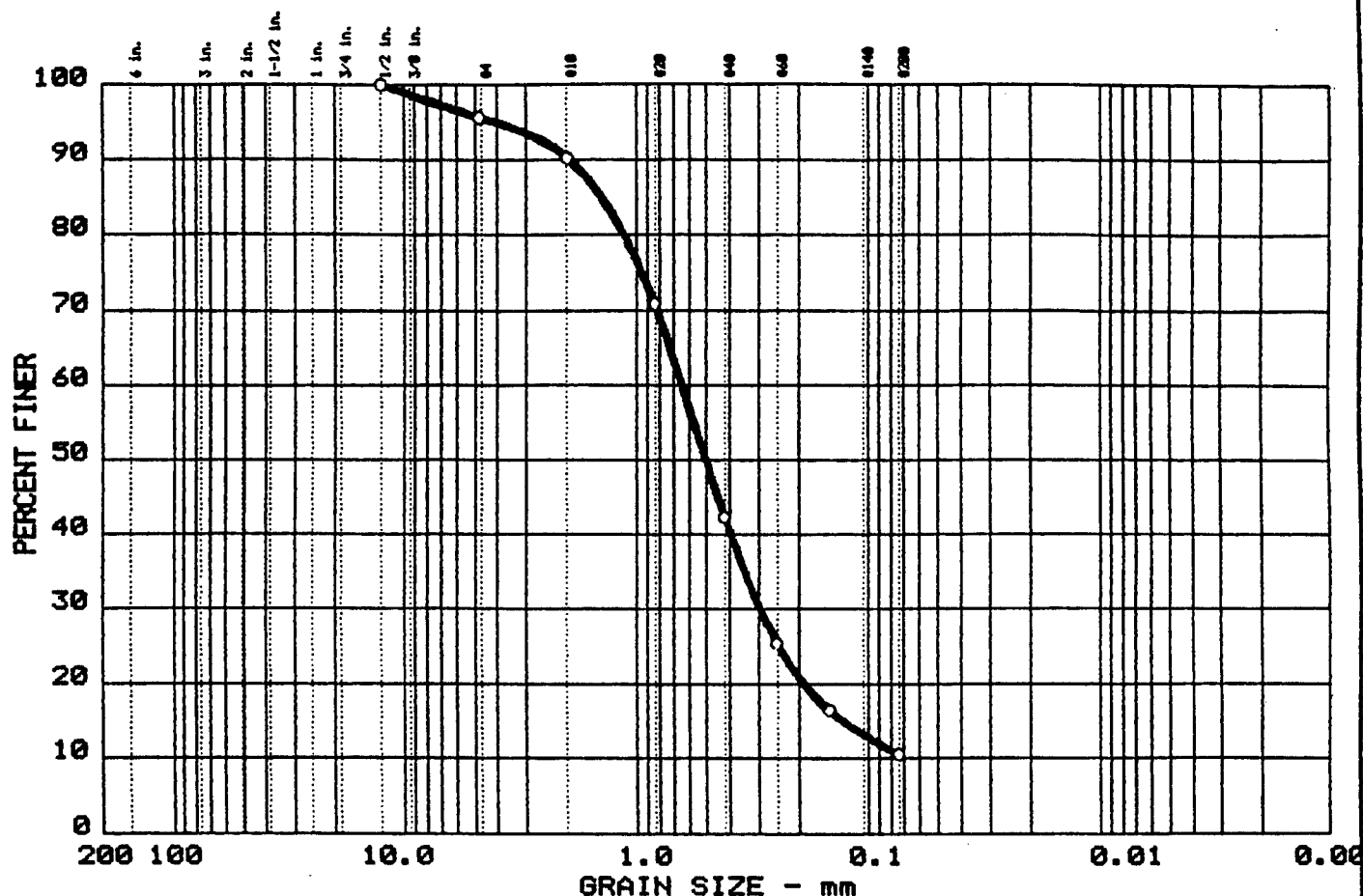
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 09D-92-02X
 As rec'd w% = 50.91
 trace Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	4.4	85.0	10.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.41	0.64	0.51	0.294	0.1299			

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND with Silt	SP-SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 o Location: Field Sample I.D. - DX090300

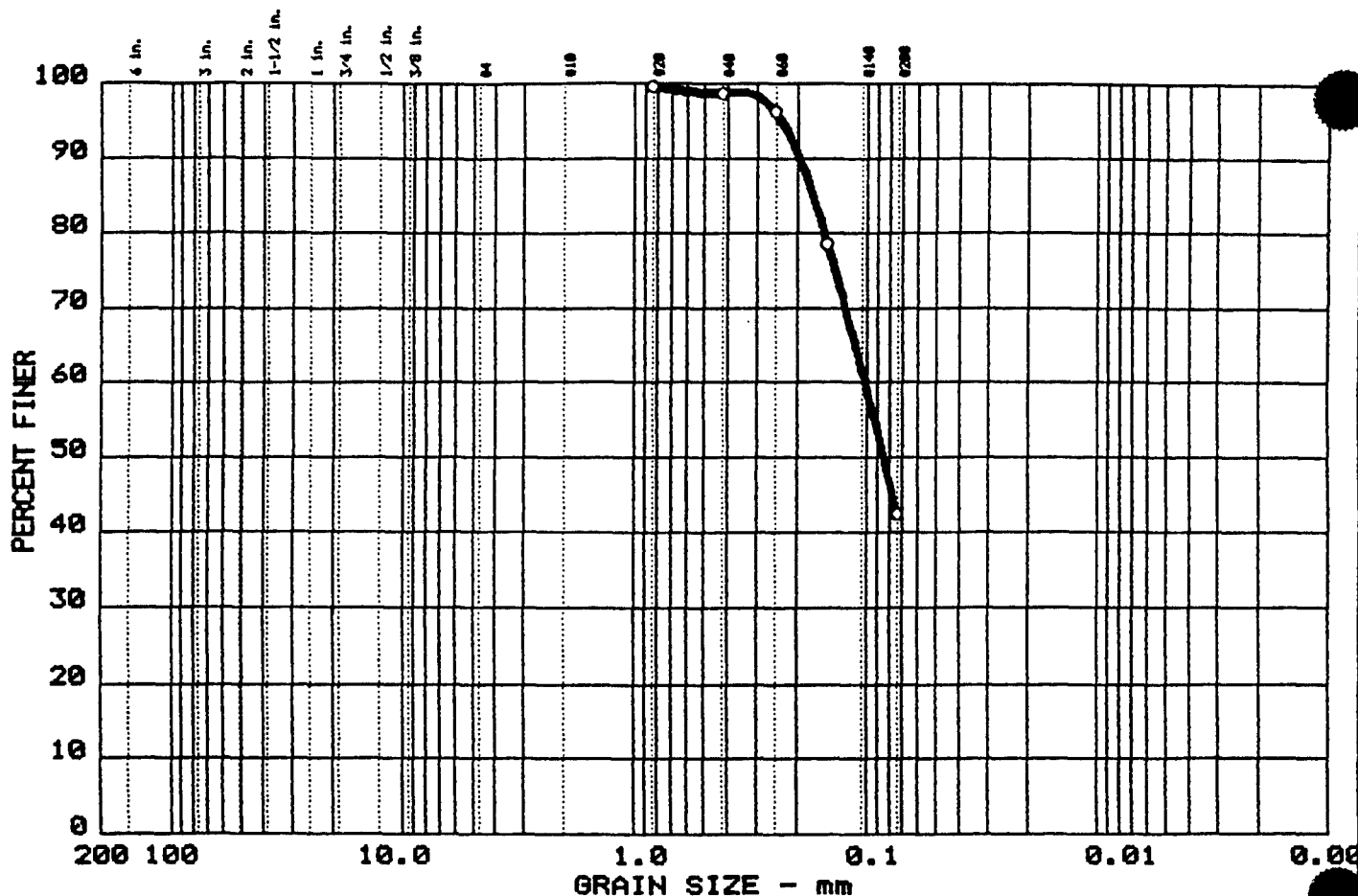
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 09D-92-03X
 As rec'd w% = 22.81

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	57.6	42.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.17	0.10	0.09					

MATERIAL DESCRIPTION	USCS	AASHTO
○ Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 ○ Location: Field Sample I.D. - DX650100

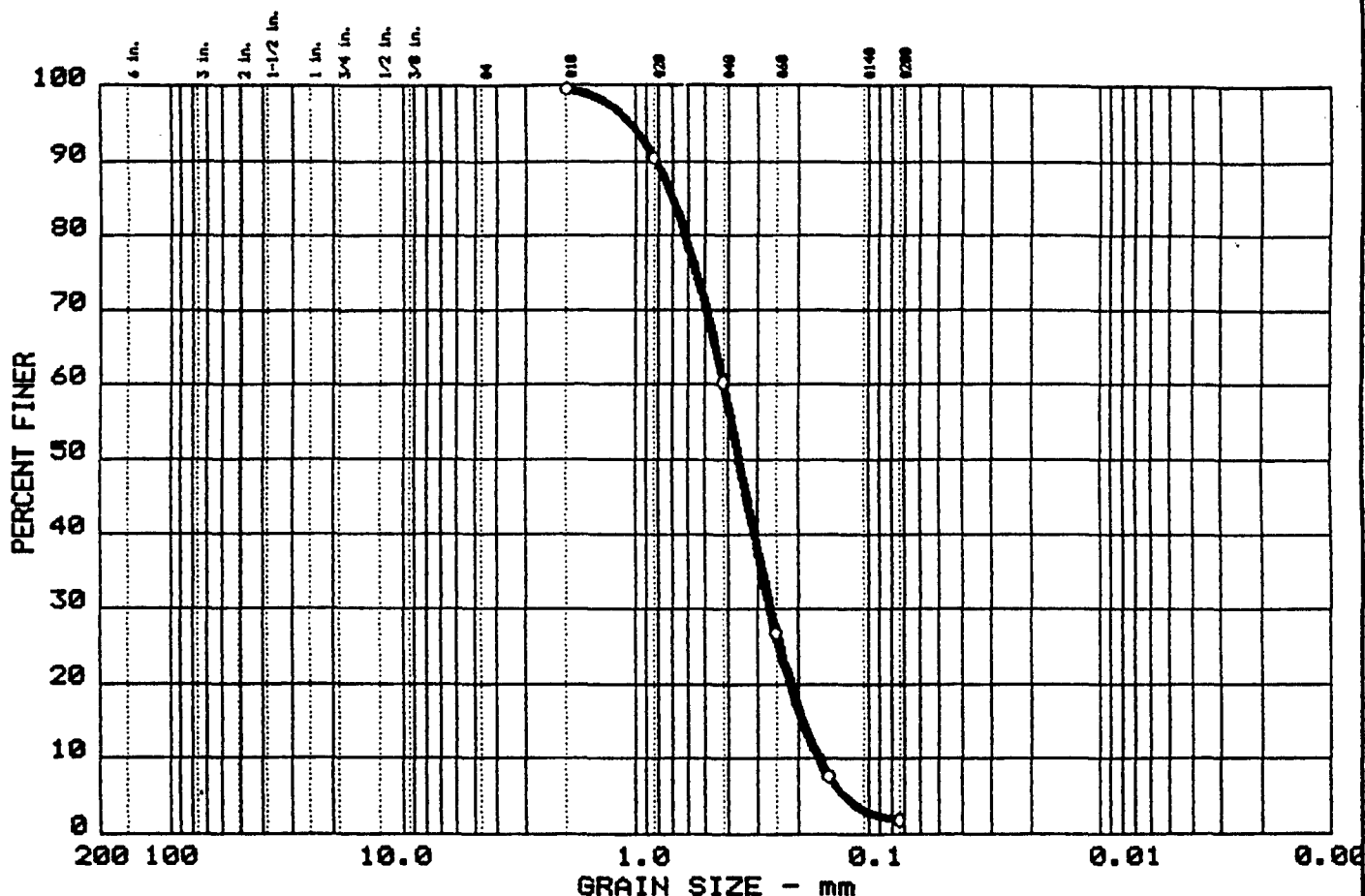
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 05D-92-01X
 As rec'd w% = 84.26
 trace (+) Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	98.1	1.9

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.70	0.42	0.36	0.264	0.1930	0.1642	1.02	2.5

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 o Location: Field Sample I.D. - DXG50200

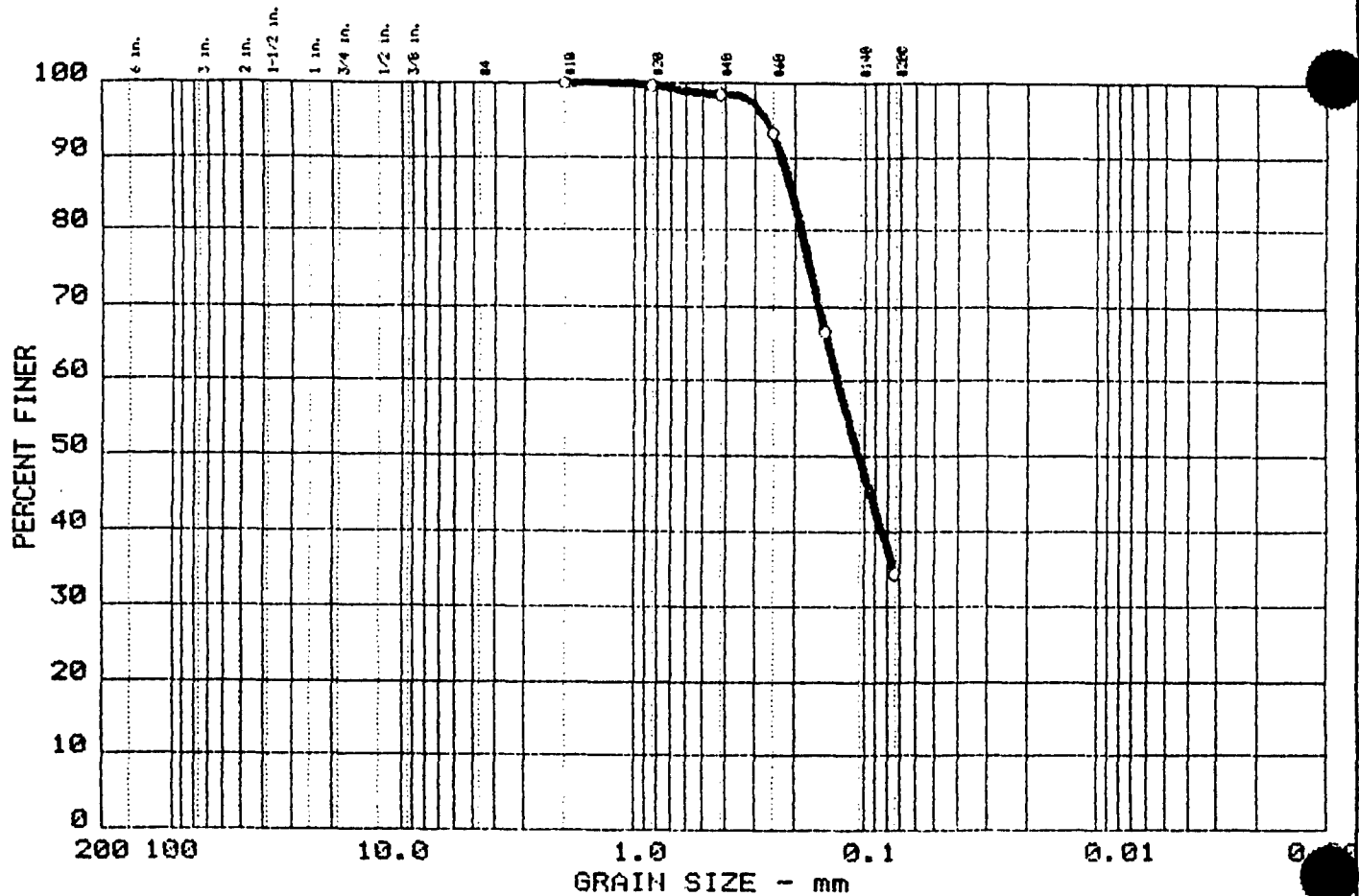
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - G5D-92-02X
 As rec'd w% = 33.85
 standing water in jar

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



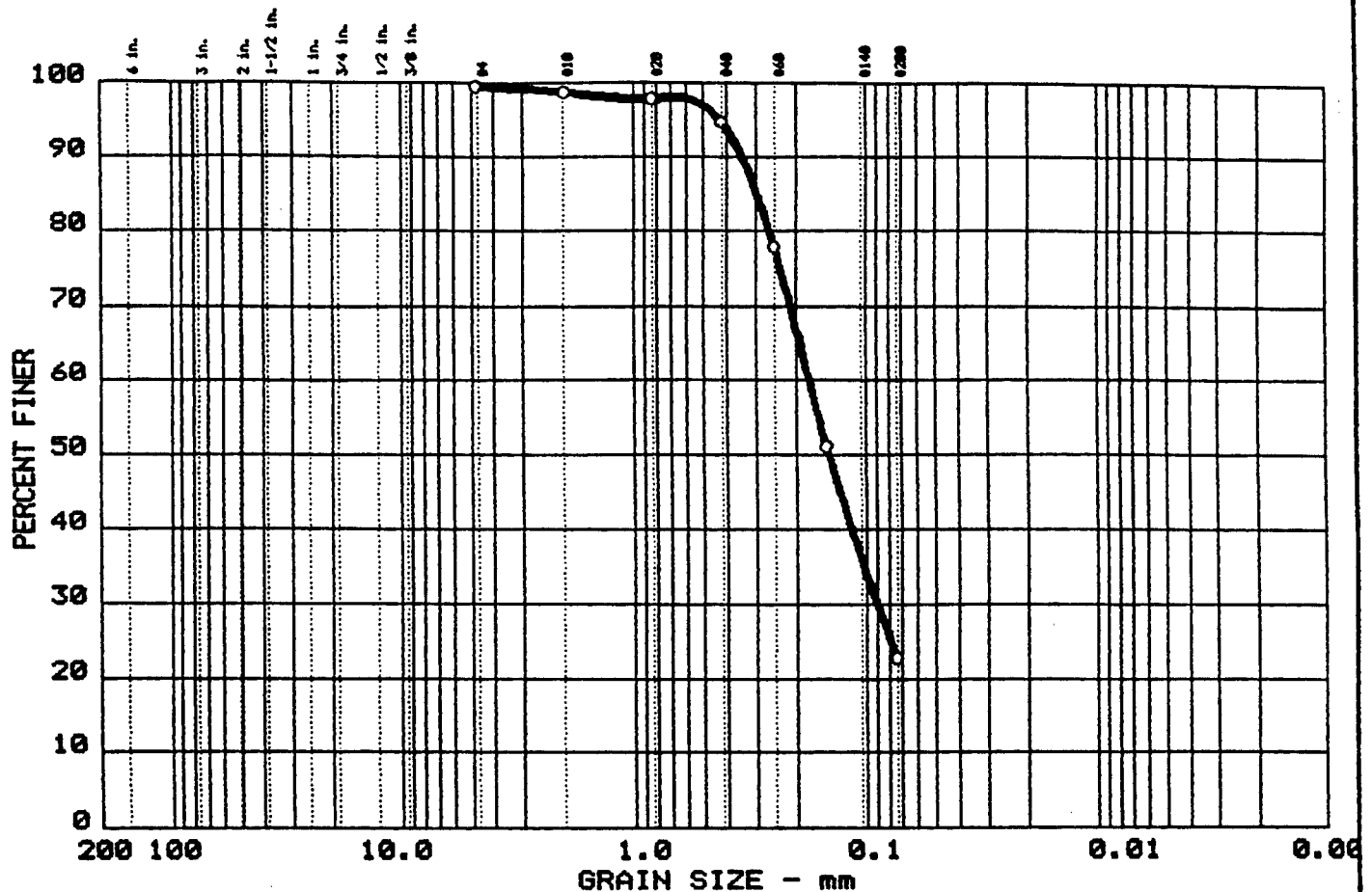
% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	65.5	34.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.21	0.13	0.11					

MATERIAL DESCRIPTION	USCS	AASHTO
○ Silty SAND (based on Grainsize)	SM	--

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SINRI GROUP 3,5,6 Location: Field Sample I.D. - DXG50300 Date: July 15, 1992	Remarks: Wash Sieve Analysis Site I.D. 65D-92-03X As rec'd w% = 69.1 Sediment - Organics
GRAIN SIZE DISTRIBUTION TEST REPORT CIVILTEST LABORATORIES, INC.	
CT - 3092	

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.5	76.7	22.8

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.30	0.18	0.15	0.090				

MATERIAL DESCRIPTION	USCS	AASHTO
○ Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 ○ Location: Field Sample I.D. - DX650400

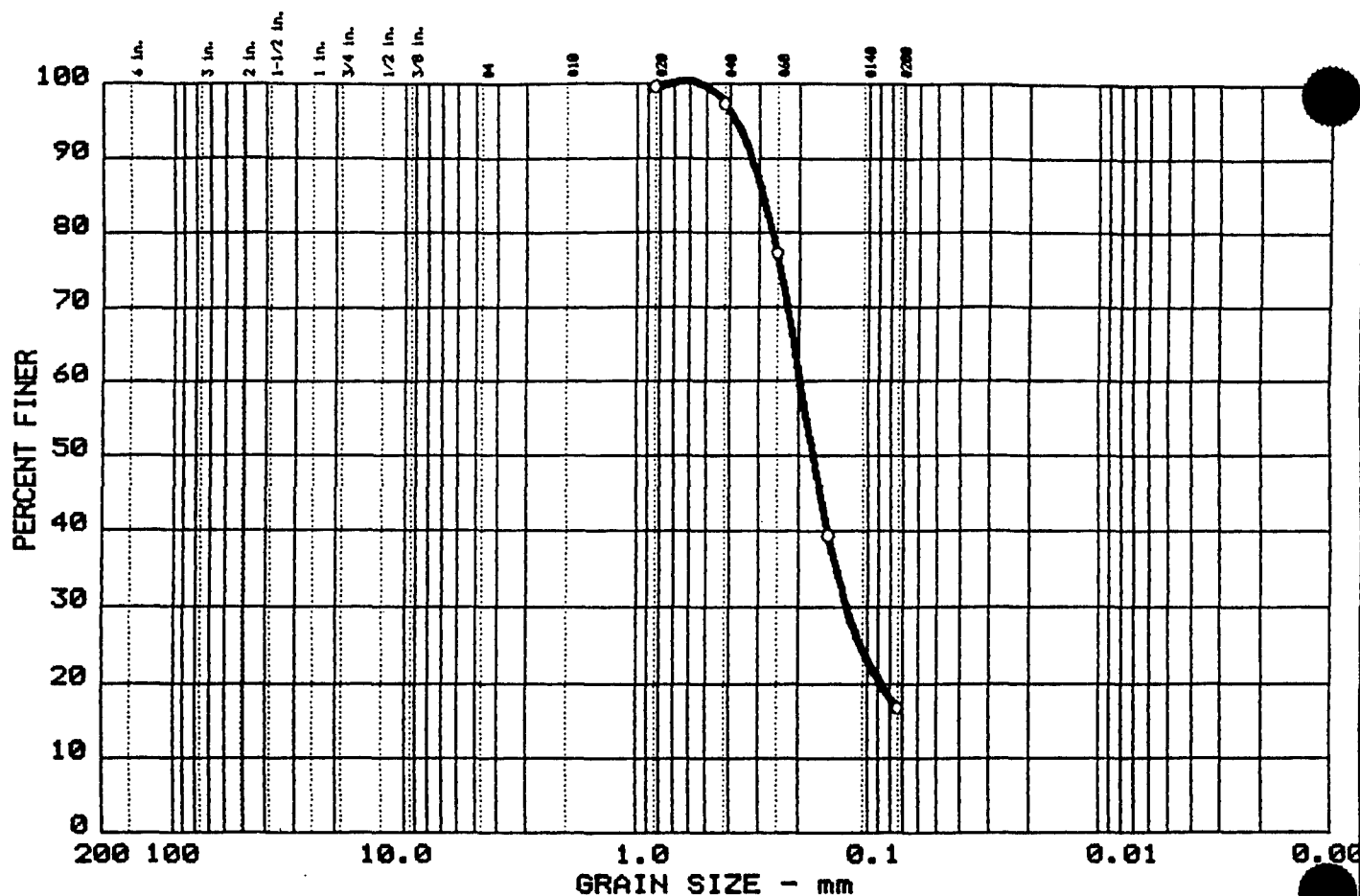
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 65D-92-04X
 As rec'd w% = 53.7
 little (-) Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	83.2	16.8

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.29	0.20	0.17	0.124				

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 o Location: Field Sample I.D. - DXG50500

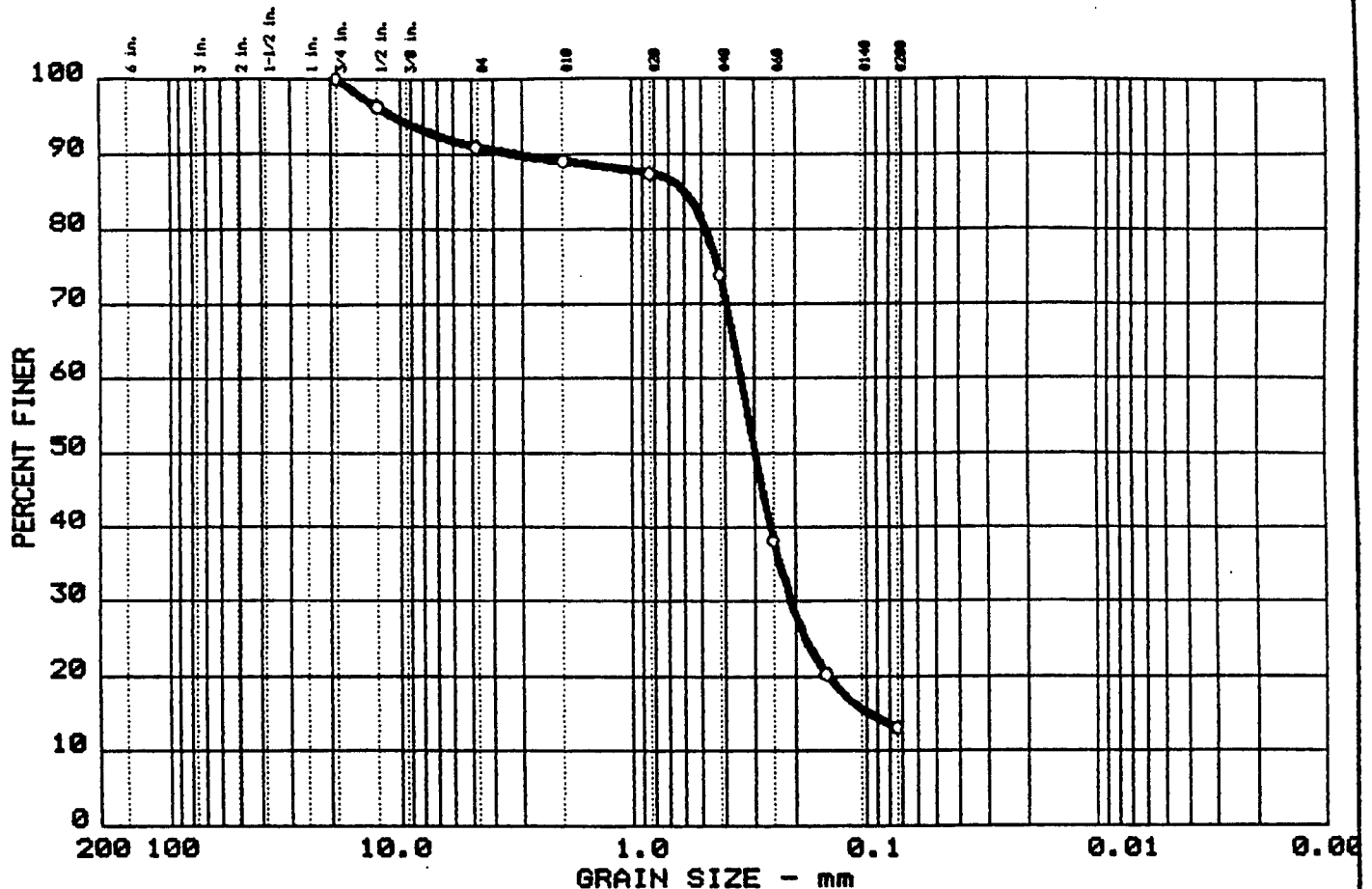
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 65D-92-05X
 As rec'd w% = 57.46
 little (+) Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	9.1	77.8	13.1

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.58	0.34	0.30	0.212	0.0959			

MATERIAL DESCRIPTION	USCS	AASHTO
0 Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 0 Location: Field Sample I.D. - DXG50600

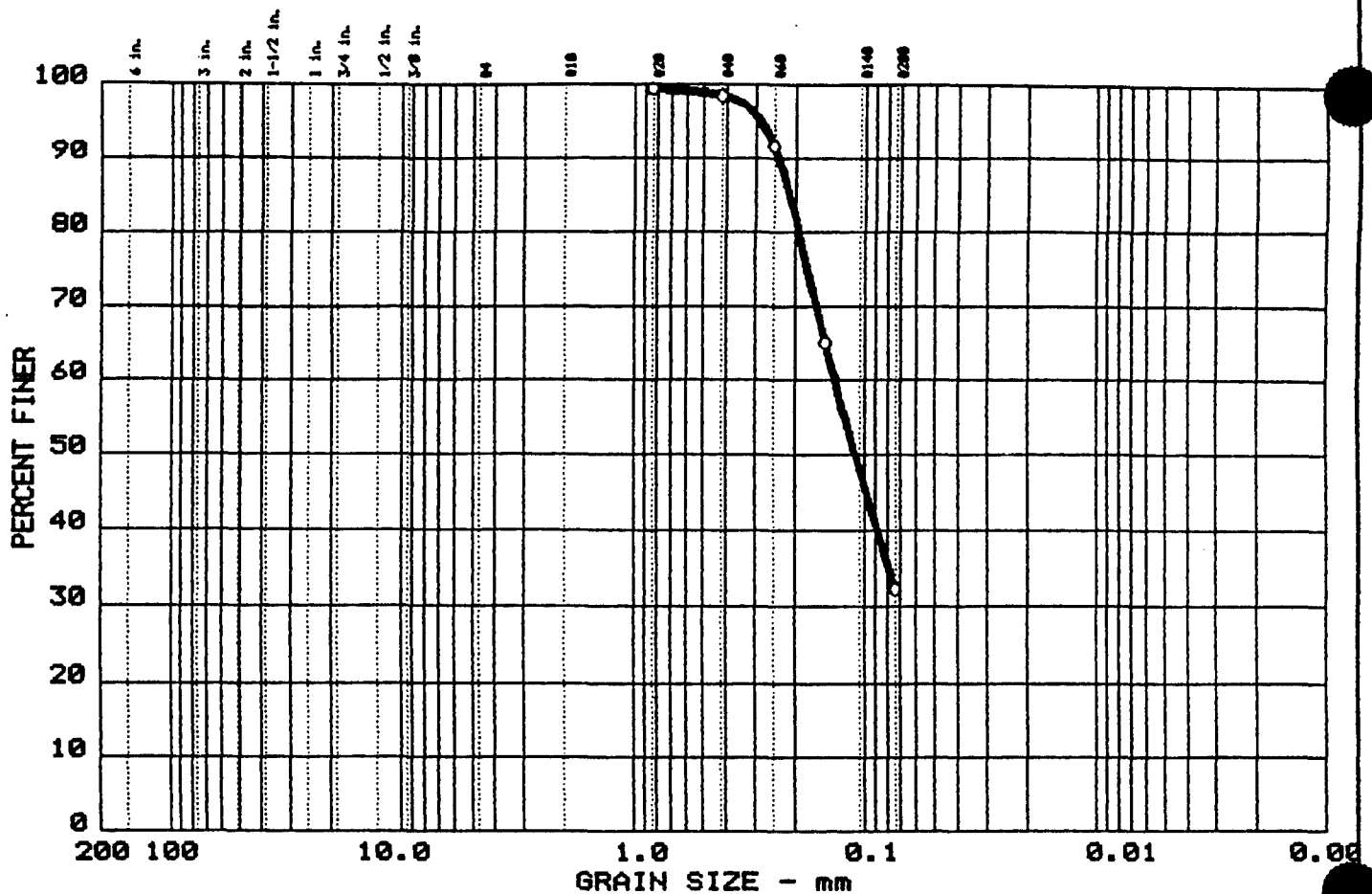
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 05D-92-06X
 As rec'd w% = 61.1
 little (+) Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	67.7	32.3

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.21	0.14	0.11					

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 o Location: Field Sample I.D. - DXG50700

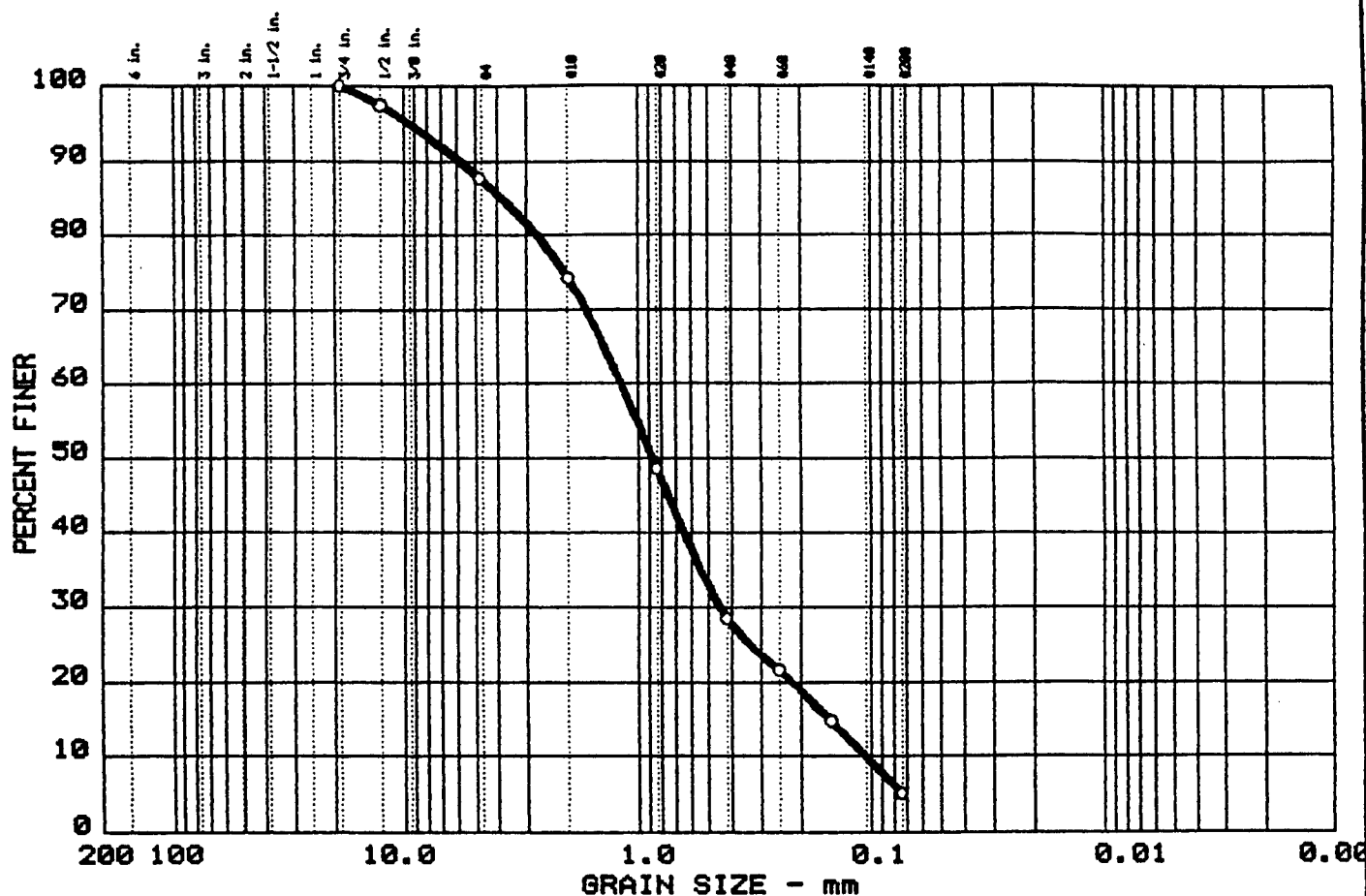
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - G5D-92-07X
 As rec'd w% = 93.5
 some (-) Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	12.3	82.6	5.1

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	3.76	1.19	0.87	0.447	0.1514	0.1047	1.60	11.4

MATERIAL DESCRIPTION	USCS	AASHTO
Well Graded SAND with Silt	SW-SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 Location: Field Sample I.D. - DX650800

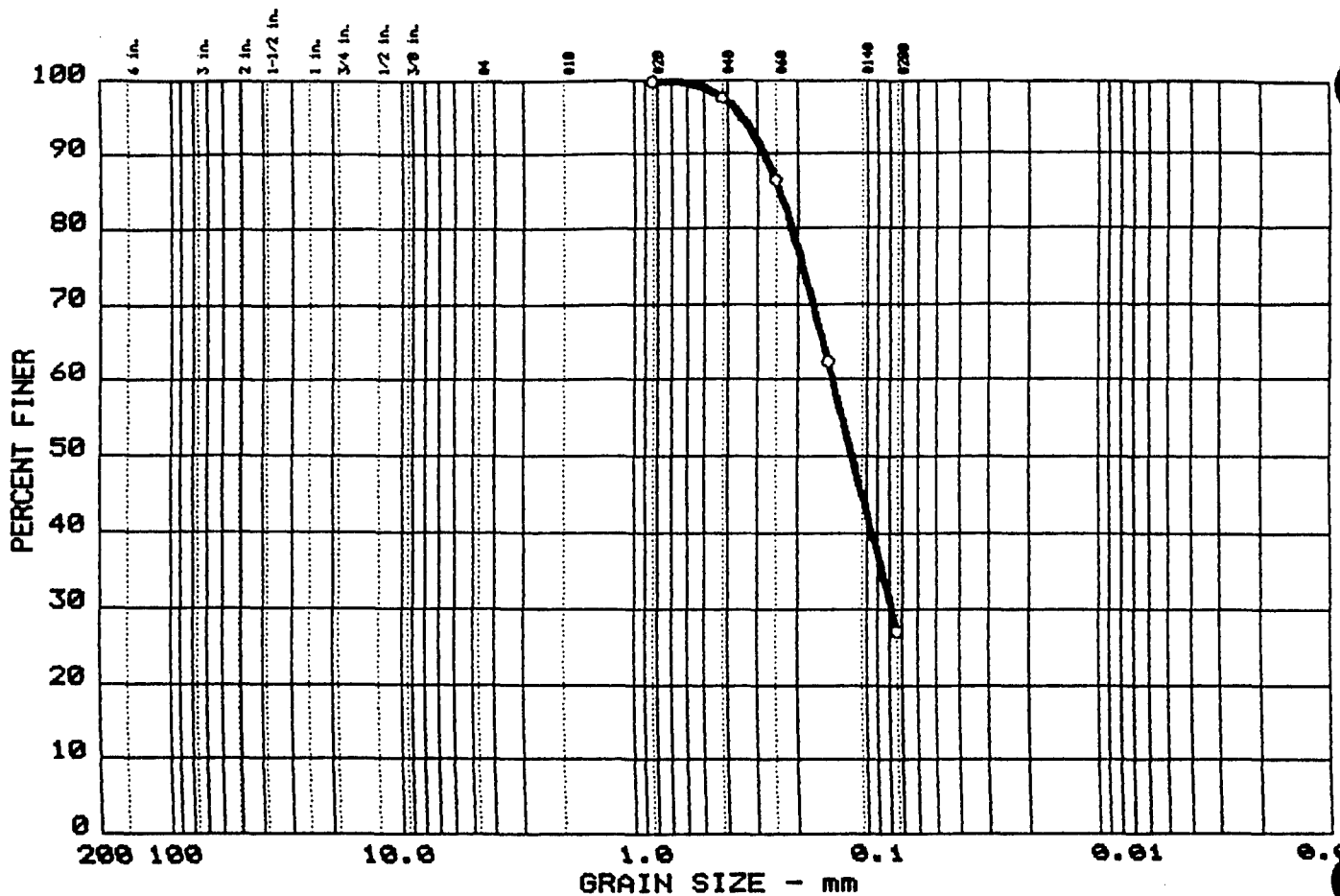
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - 05D-92-08X
 As rec'd w% = 27.67

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	72.8	27.2

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.24	0.14	0.12	0.078				

MATERIAL DESCRIPTION	USCS	AASHTO
0 Silty SAND (based grain-size)	SM	--

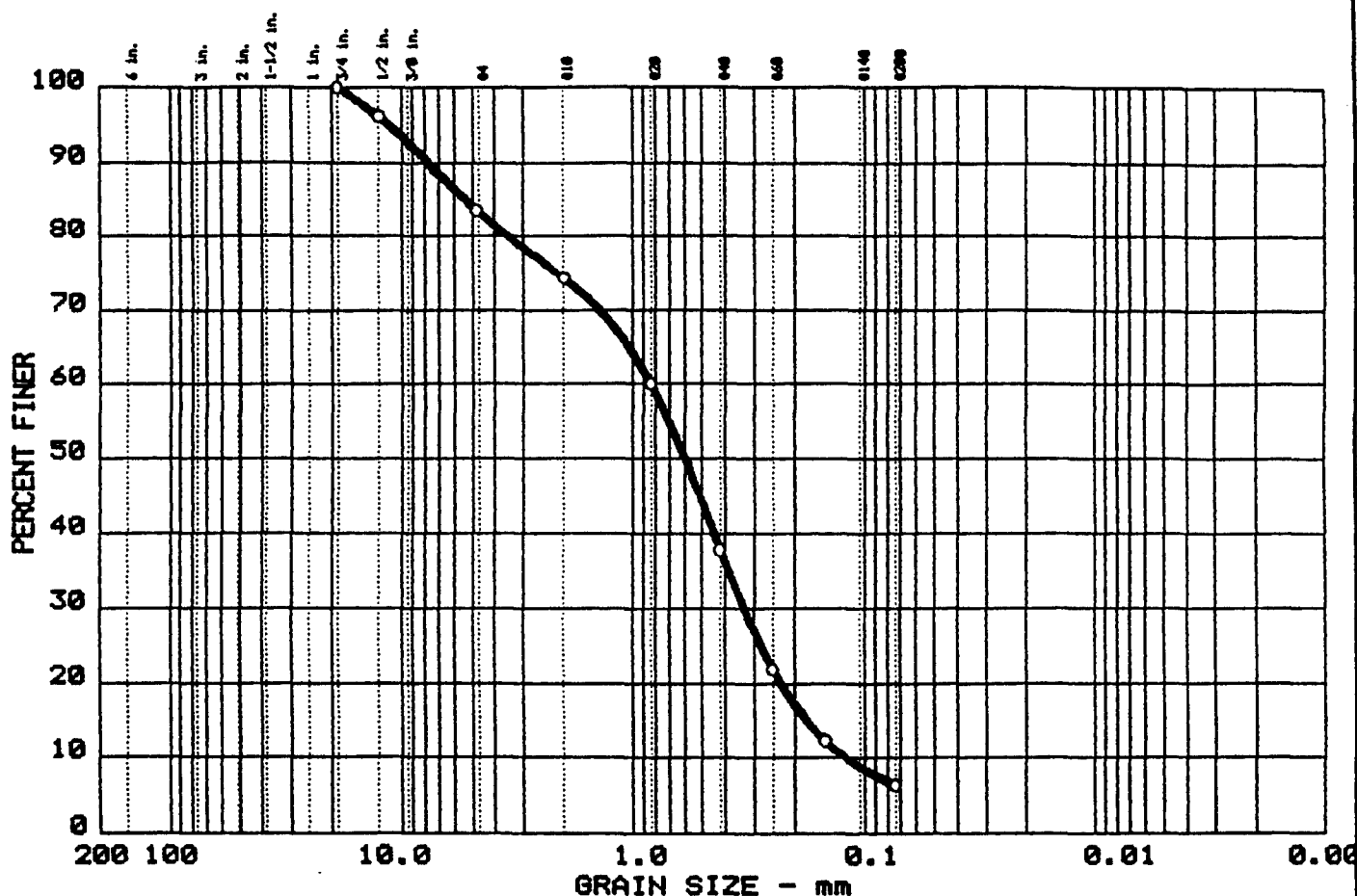
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 0 Location: Field Sample I.D. - DX650900
 Date: July 22, 1992

Remarks:
 Wash Sieve Analysis
 Site I.D. - 65D-92-09X
 As rec'd w% = 32.52
 Little (+) Organics

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% FINES
0	0.0	16.4	77.2	6.4

	LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
0	--	--	5.31	0.83	0.60	0.332	0.1782	0.1205	1.10	6.9

MATERIAL DESCRIPTION	USCS	AASHTO
0 Well Graded SAND with Silt	SW-SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 0 Location: Field Sample I.D. - DXG51000

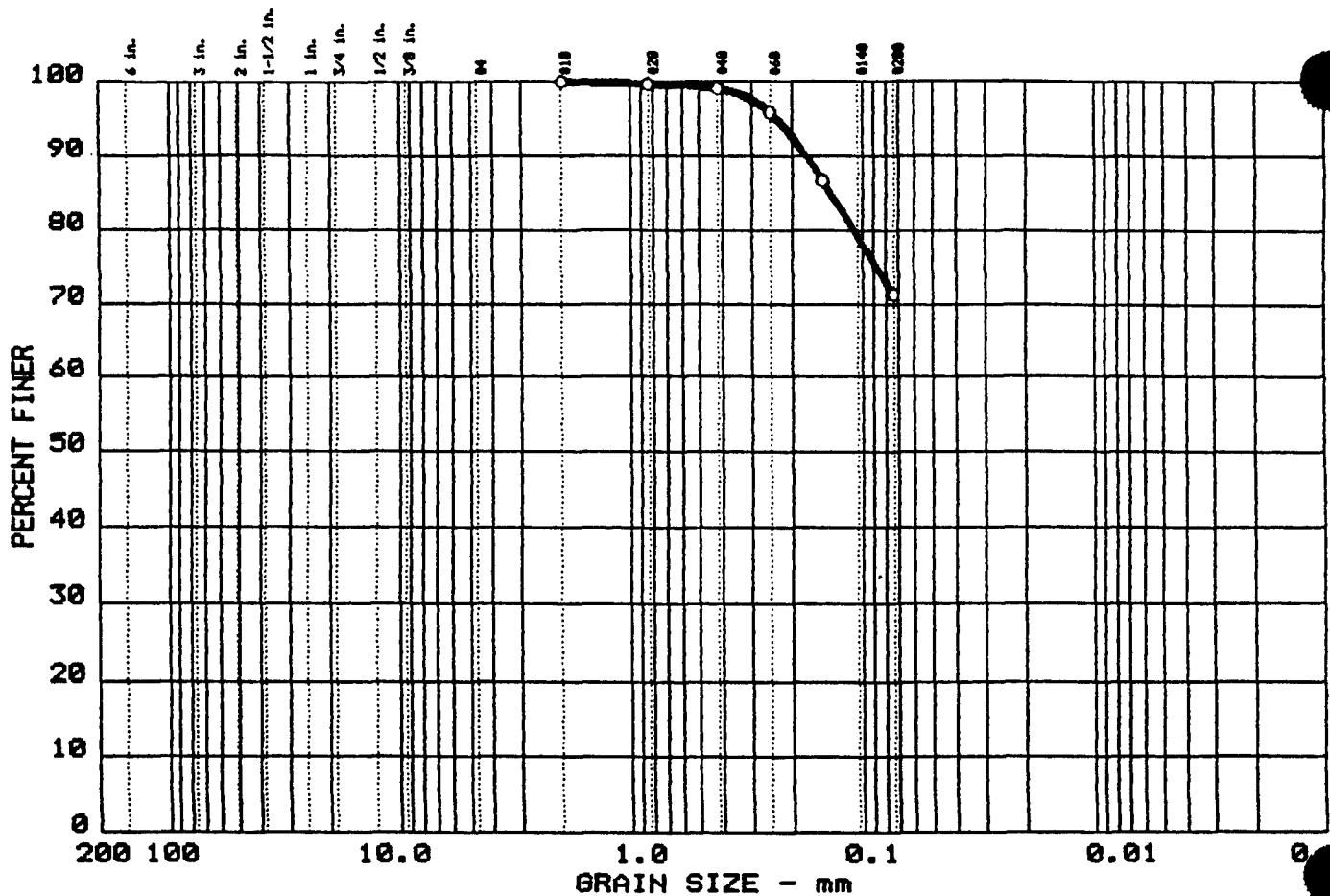
Date: July 22, 1992

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - G5D-92-10X
 As rec'd w% = 31.32
 trace (-) Organics

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	28.7	71.3

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.14							

MATERIAL DESCRIPTION	USCS	AASHTO
○ SILT (based on grain-size)	ML	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 ○ Location: Field Sample I.D. - DX660100

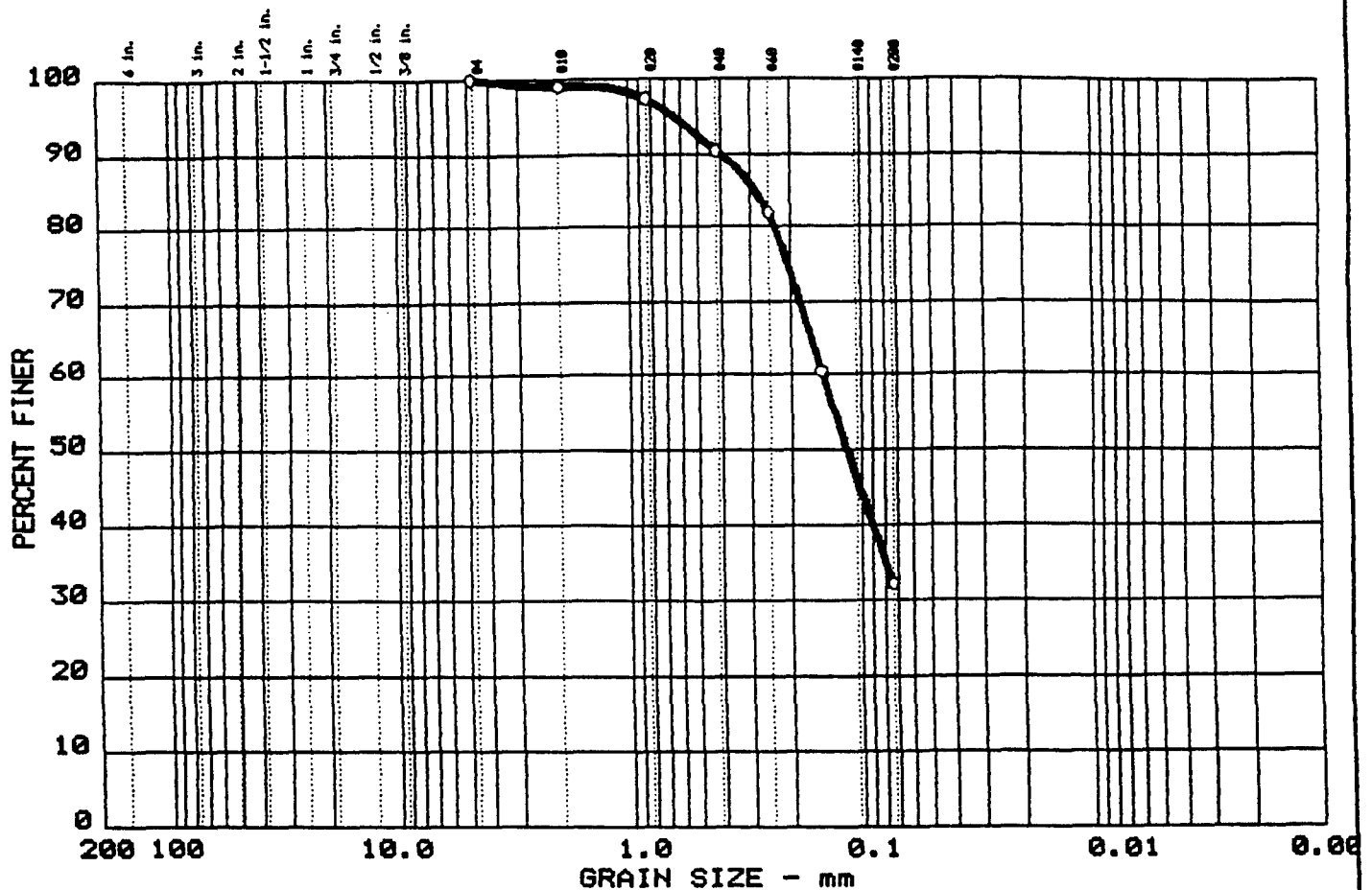
Date: July 23, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - G6D-92-01X
 As rec'd w% = 191.7
 high Organic content

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	67.8	32.2

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.28	0.15	0.12					

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 o Location: Field Sample I.D. - DXG60200

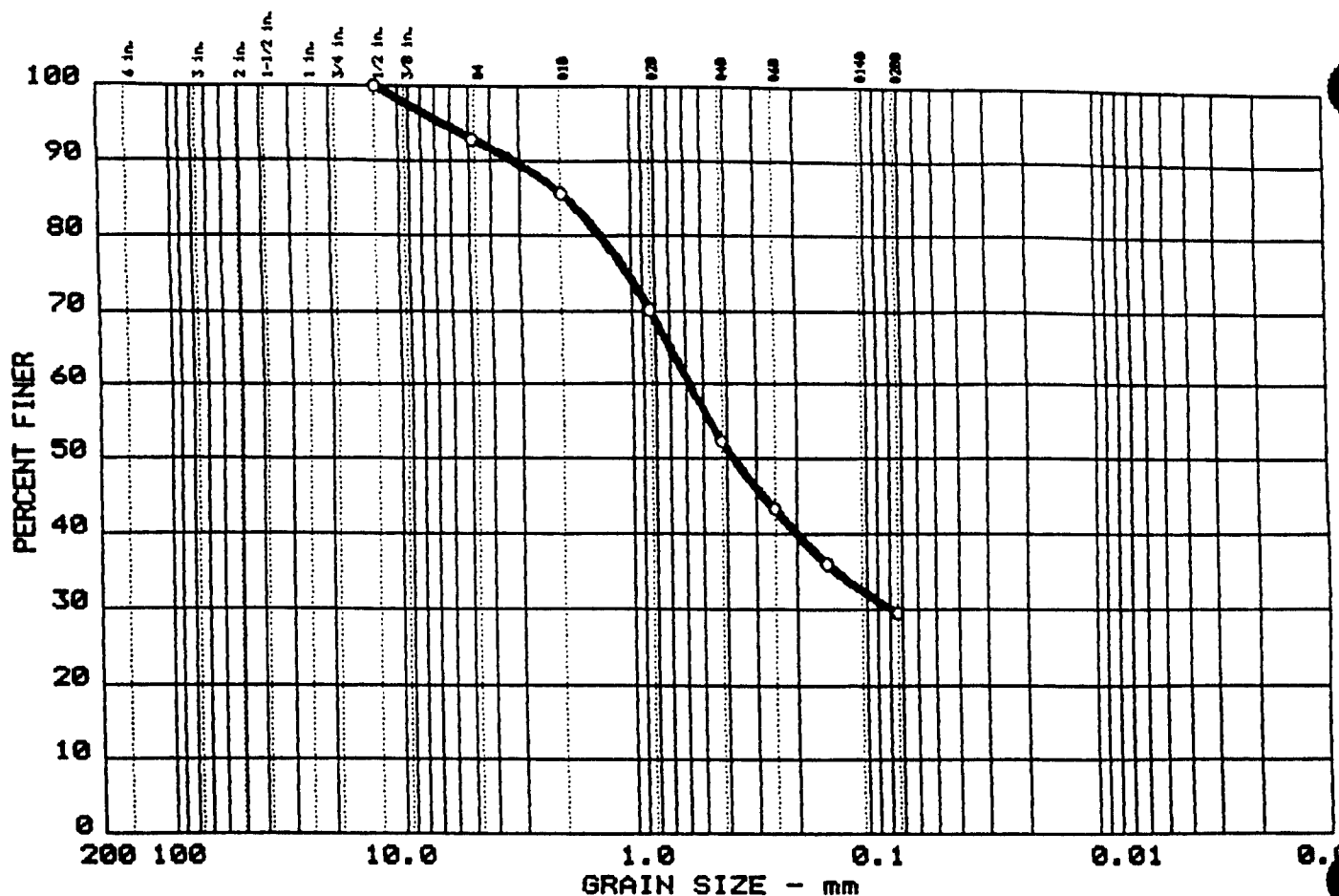
 Date: July 23, 1993

Remarks:
 Wash Sieve Analysis
 Site I.D. - 06D-92-02X
 As rec'd w% = 105.19
 little (+) Organics

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	7.2	63.3	29.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.88	0.57	0.37	0.075				

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND (based on grain-size)	SM	--

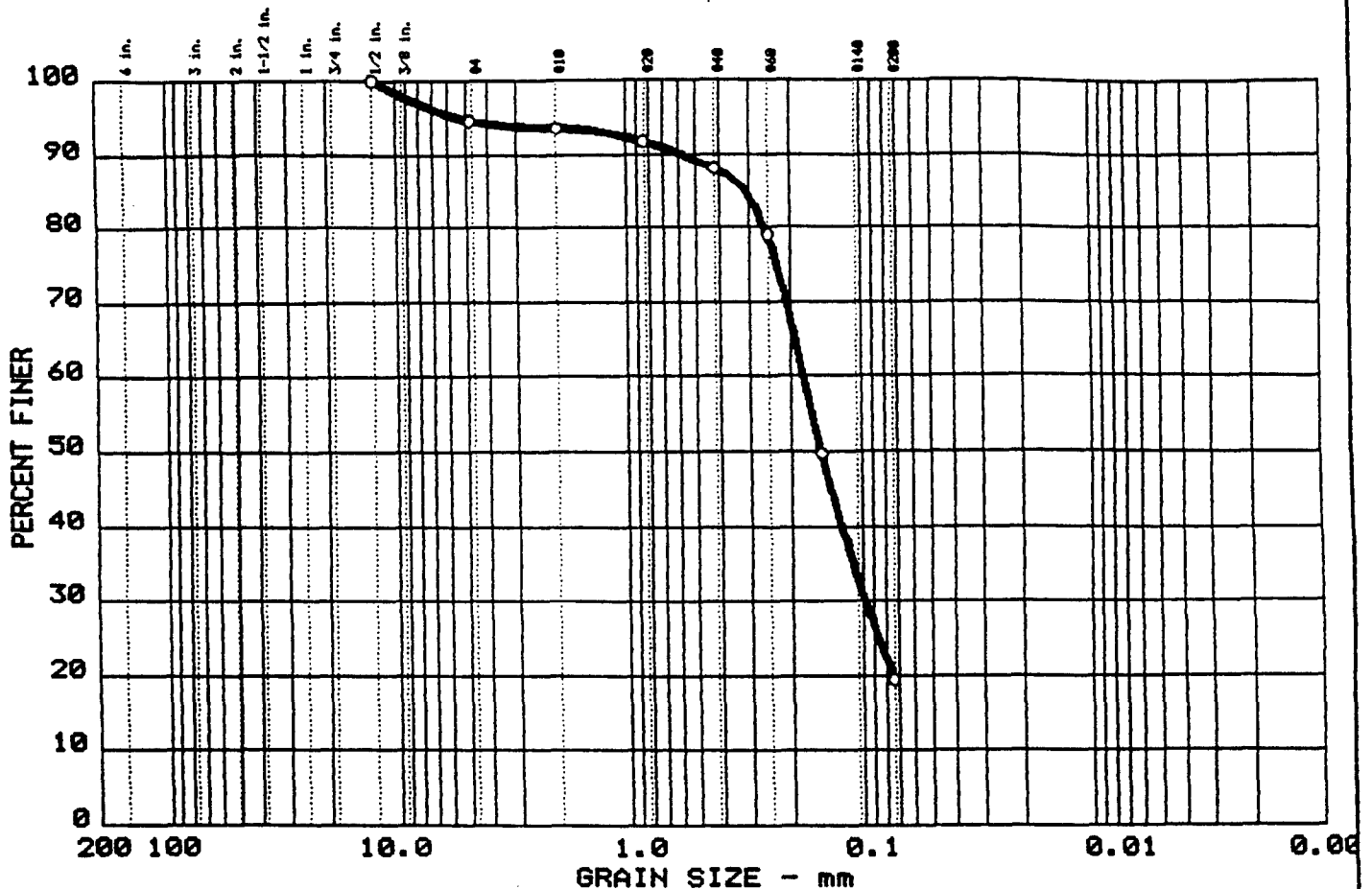
Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 o Location: Field Sample I.D. - DX660300
 Date: July 23, 1993

Remarks:
 Wash Sieve Analysis
 Site I.D. - G6D-92-03X
 As rec'd w% = 59.5
 some (-) Organics

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

CT - 3092

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	5.3	75.2	19.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.31	0.18	0.15	0.098				

MATERIAL DESCRIPTION	USCS	AASHTO
○ Silty SAND (based on grain-size)	SM	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 ○ Location: Field Sample No. - DXG60400

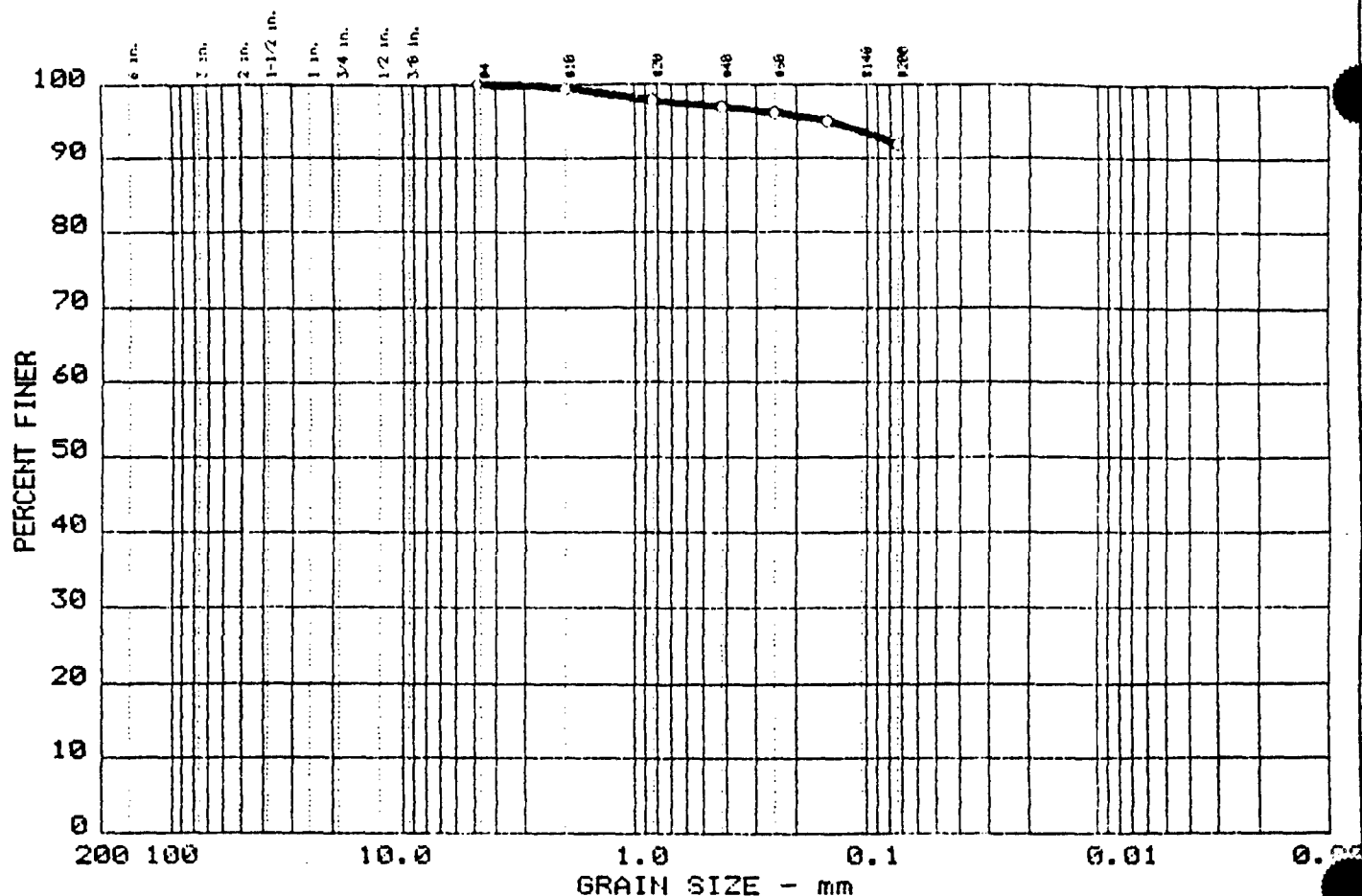
Date: July 23, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - G6D-92-04X
 As rec'd w% = 61.9
 trace (+) Organics

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	8.2	91.8

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--								

MATERIAL DESCRIPTION	USCS	AASHTO
○ SILT (based on Grainsize)	ML	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI GROUP 3,5,6
 ○ Location: Field Sample I.D. - DX630100
 Date: July 15, 1992

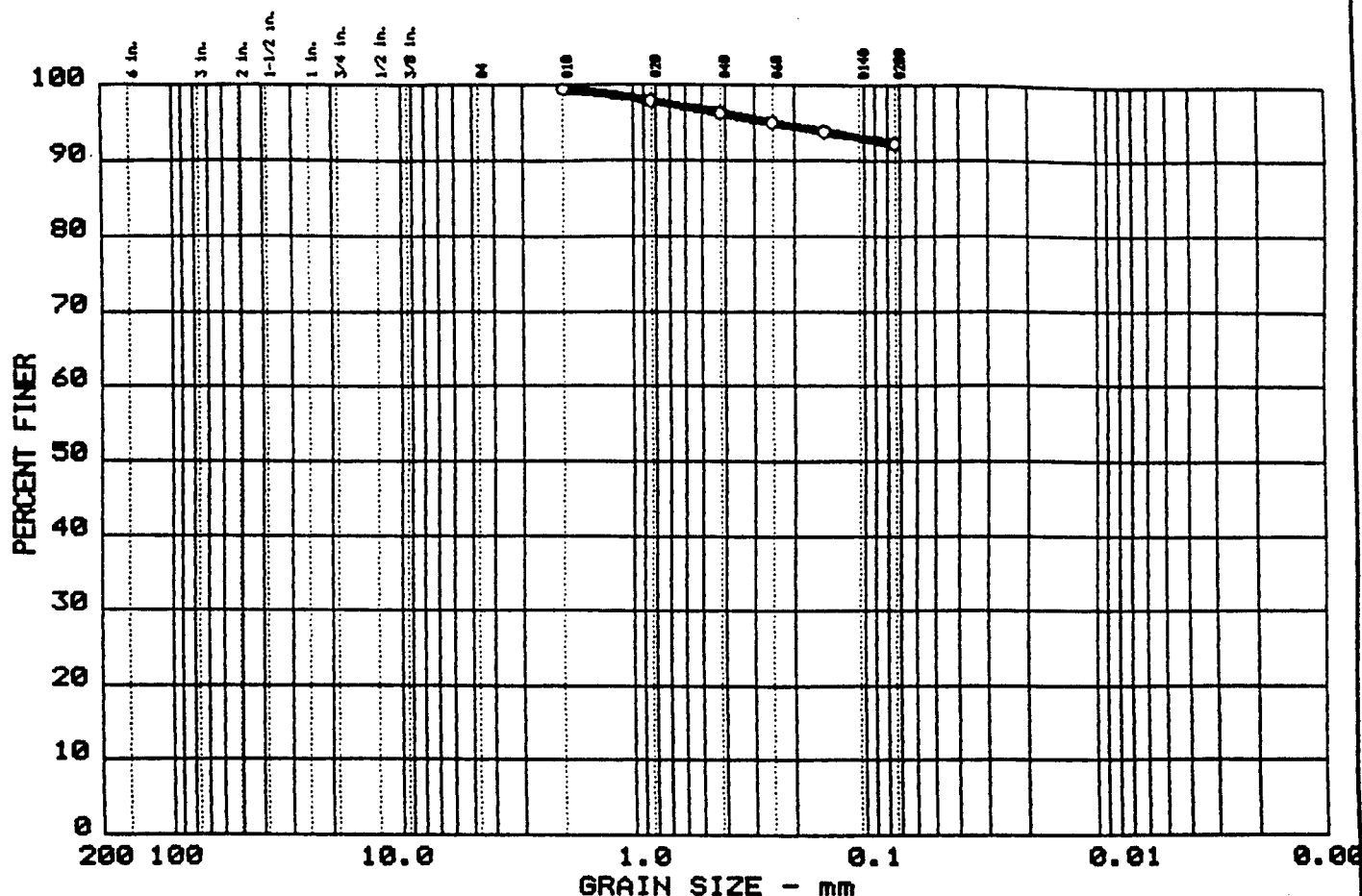
Remarks:
 Wash Sieve Analysis
 Site I.D. G3D-92-01X
 As rec'd w% = 550.0% *
 Sediment - Very Organic

GRAIN SIZE DISTRIBUTION TEST REPORT
CIVILTEST LABORATORIES, INC.

CT - 3092

* Free standing water noted in driller jar sample

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	7.7	92.3

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--								

MATERIAL DESCRIPTION	USCS	AASHTO
0 SILT (based on grain-size)	ML	--

Project No.: 06917.04
 Project: USATHAMA - FORT DEVENS SI/RI
 Location: Field Sample I.D. - DX630200

Date: July 23, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 CIVILTEST LABORATORIES, INC.

Remarks:
 Wash Sieve Analysis
 Site I.D. - G3D-92-02X
 As rec'd w% = 719.8
 v. high Organic content

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Grain size distribution curve for a sample of sand. The graph plots Percent Finer (0 to 100) against Grain Size in mm (200 to 0.075). The curve shows a very fine sand with a high percentage of material passing through the 0.075 mm sieve.

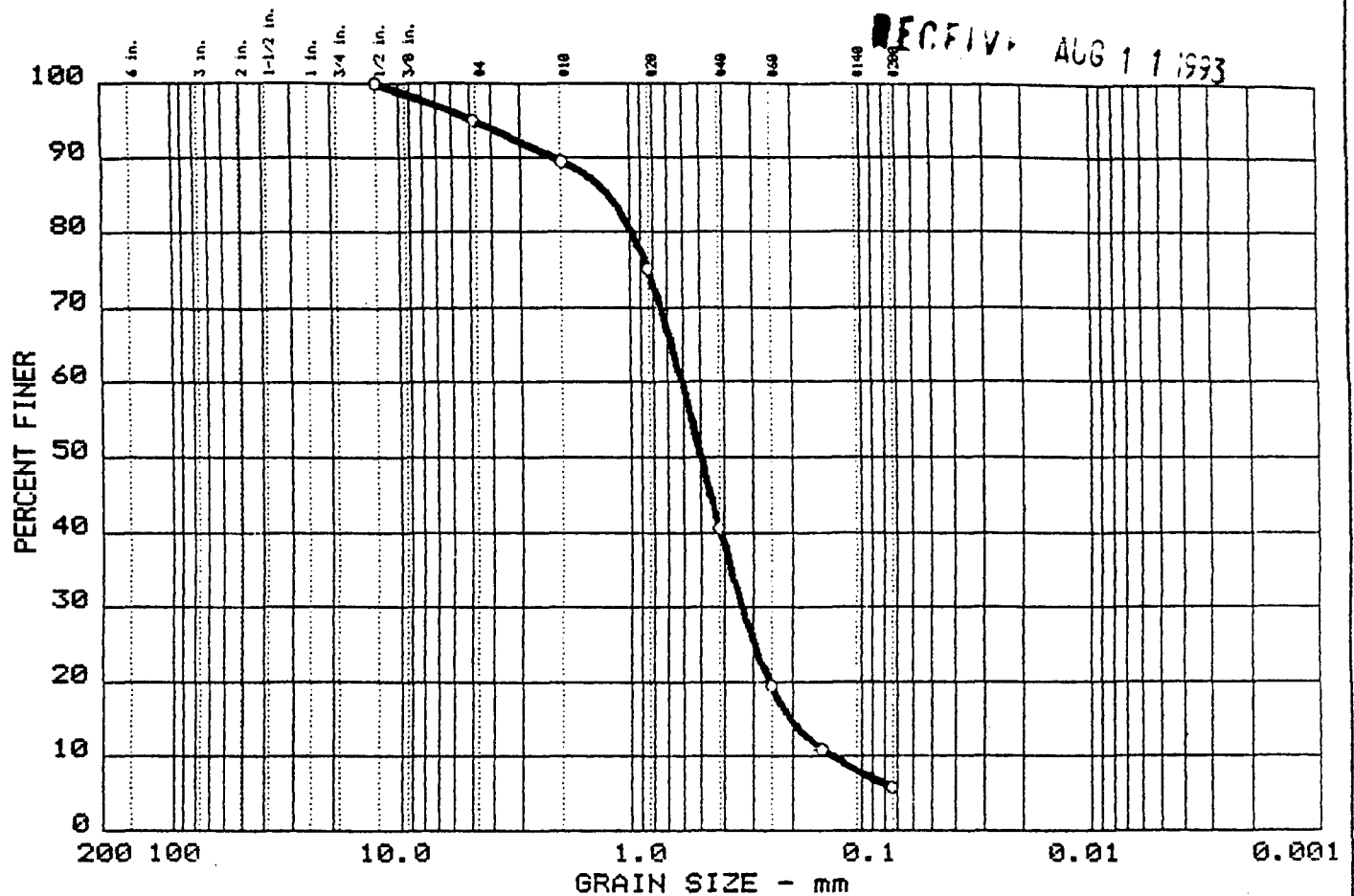
Grain Size (mm)	Percent Finer (%)
200	100
100	100
60	100
40	100
30	100
25	100
20	100
15	100
12.5	100
10	100
7.5	100
6	100
4.75	100
3.75	100
3.0	100
2.5	100
2.0	100
1.5	100
1.18	100
0.85	100
0.75	100
0.60	100
0.50	100
0.425	100
0.354	100
0.300	100
0.250	100
0.200	100
0.150	100
0.125	100
0.106	100
0.085	100
0.075	100

[illegible]

Project No.: 06917.04 Project: USATHAMA - FORT DEVENS SI/RI O Location: Field Sample I.D. - DXG30300 Date: July 23, 1993	Remarks: Wash Sieve Analysis Site I.D. - 63D-92-03X as rec'd w% = 1,275 v. high Organic content
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GRAIN SIZE DISTRIBUTION TEST REPORT

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% +3"	% GRAVEL	% SAND	% FINES
0.0	5.1	89.1	5.8

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.24	0.60	0.50	0.335	0.2042	0.1318	1.41	4.6

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP-SM	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

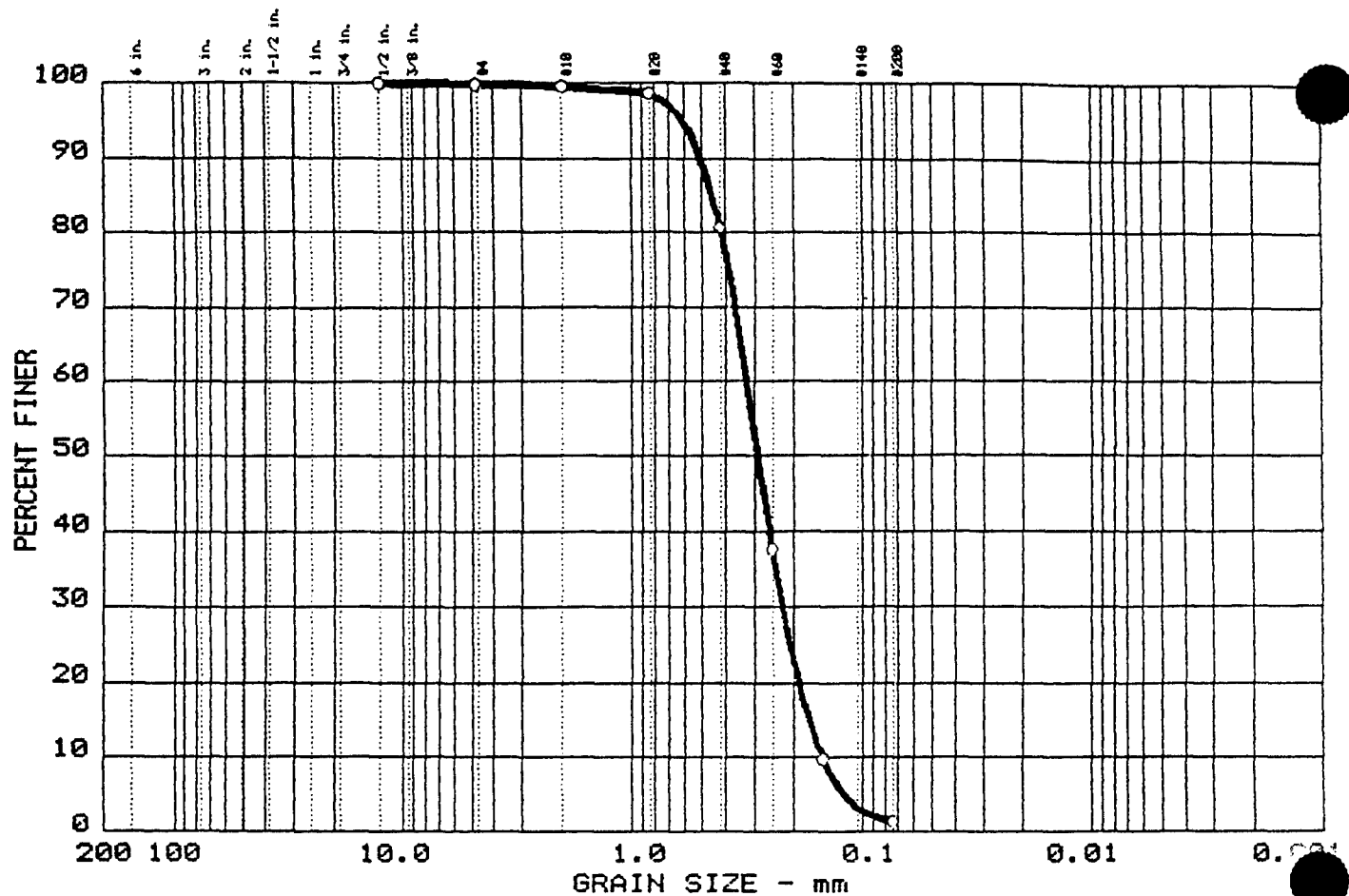
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. G3M-93-08X
 Depth 2.0'-4.0'
 Sta. BXG30802
 As rec'd w% = 3.3

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.2	98.4	1.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.45	0.32	0.29	0.225	0.1708	0.1488	1.05	2.2

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 ○ Location: Ayer, MA

Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

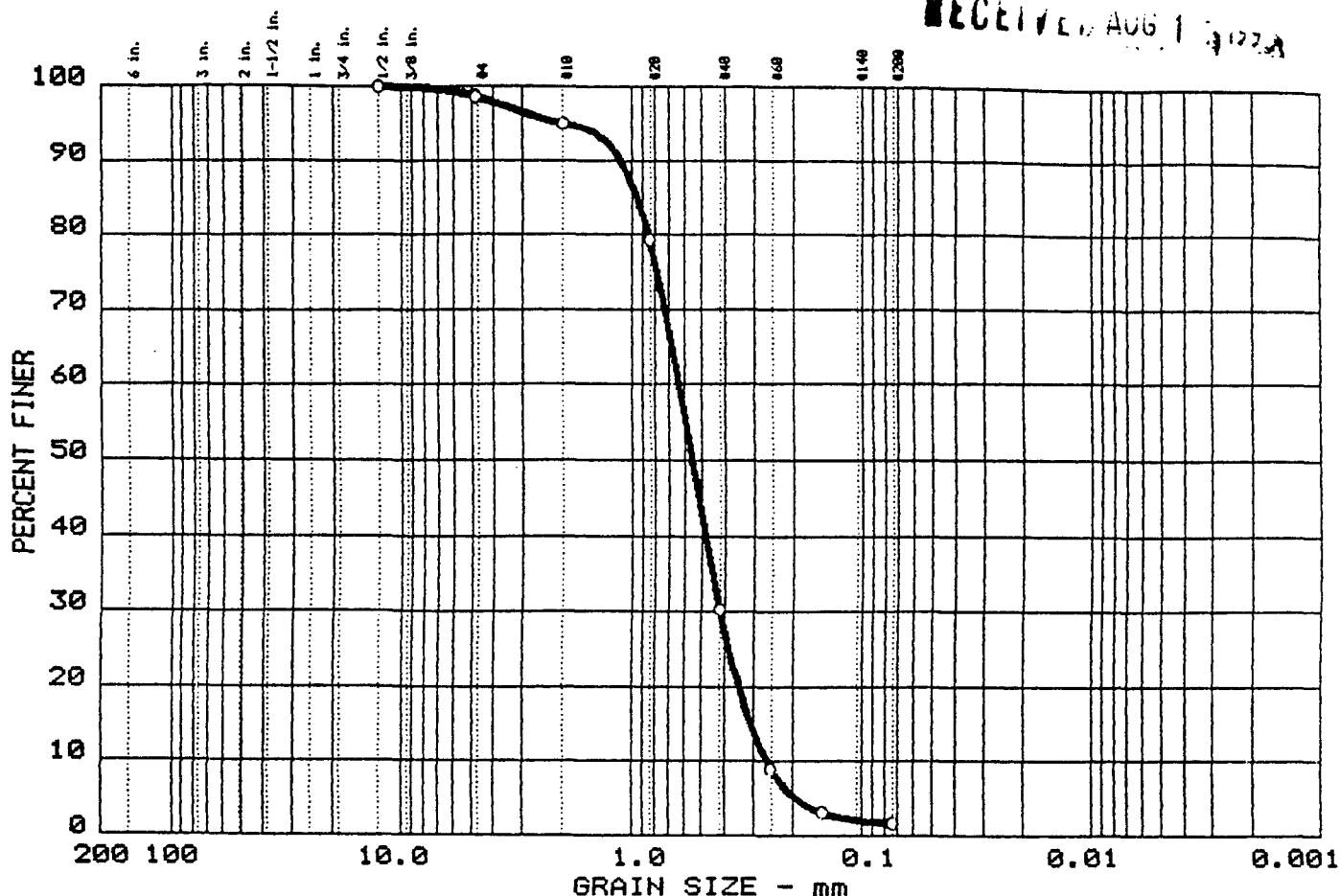
Remarks:
 Sample No. G3M-93-08X
 Depth 20.0'-22.0'
 Sta. BXG30820

As rec'd w% = 23.4

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GRAIN SIZE DISTRIBUTION TEST REPORT

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% +3"	% GRAVEL	% SAND	% FINES
0.0	1.3	97.0	1.7

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.95	0.63	0.55	0.417	0.3058	0.2603	1.07	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

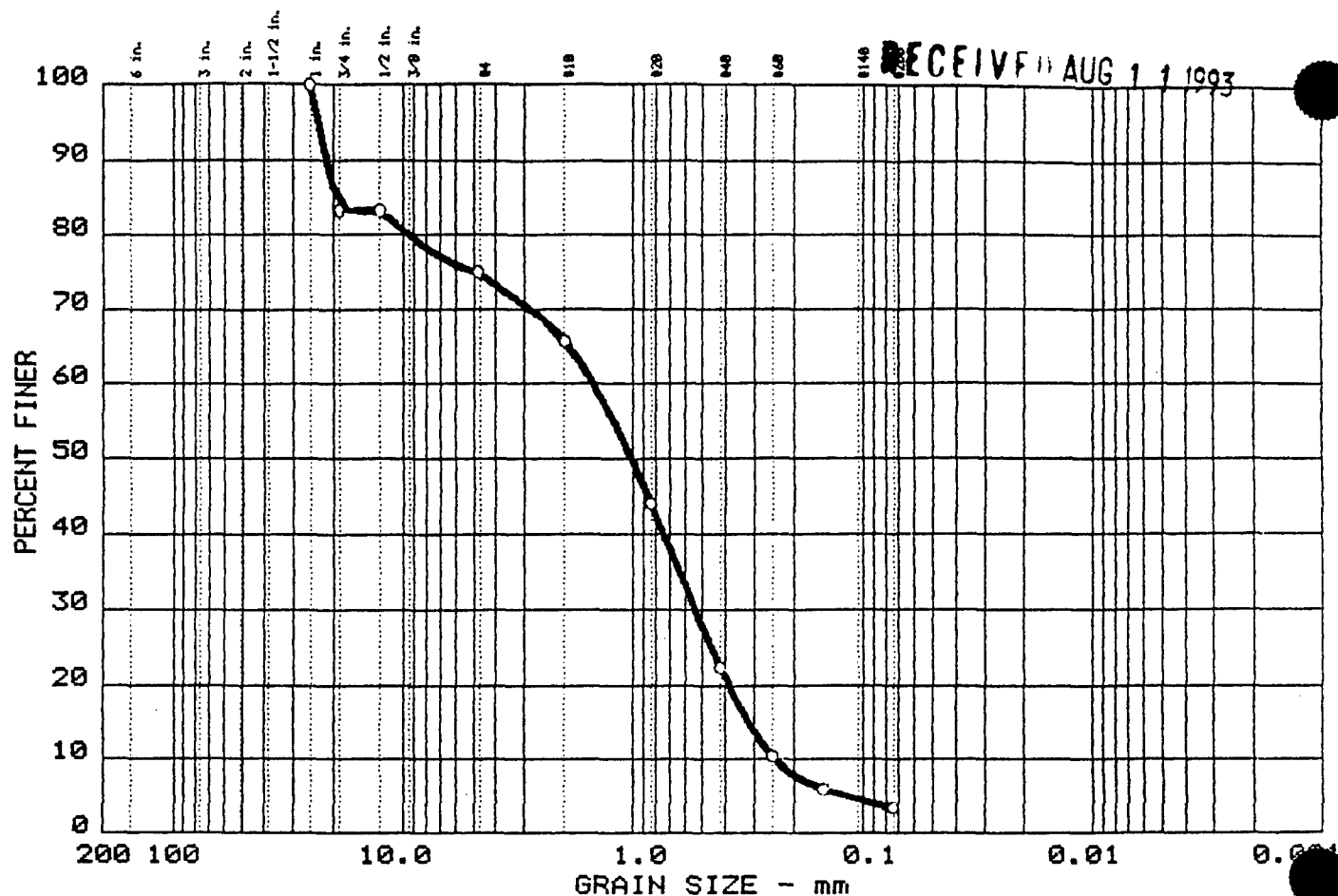
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 38B-93-01X
 Depth 3.0' - 5.0'
 Sta. BX380103
 As rec'd w% = 2.6

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	25.0	71.6	3.4

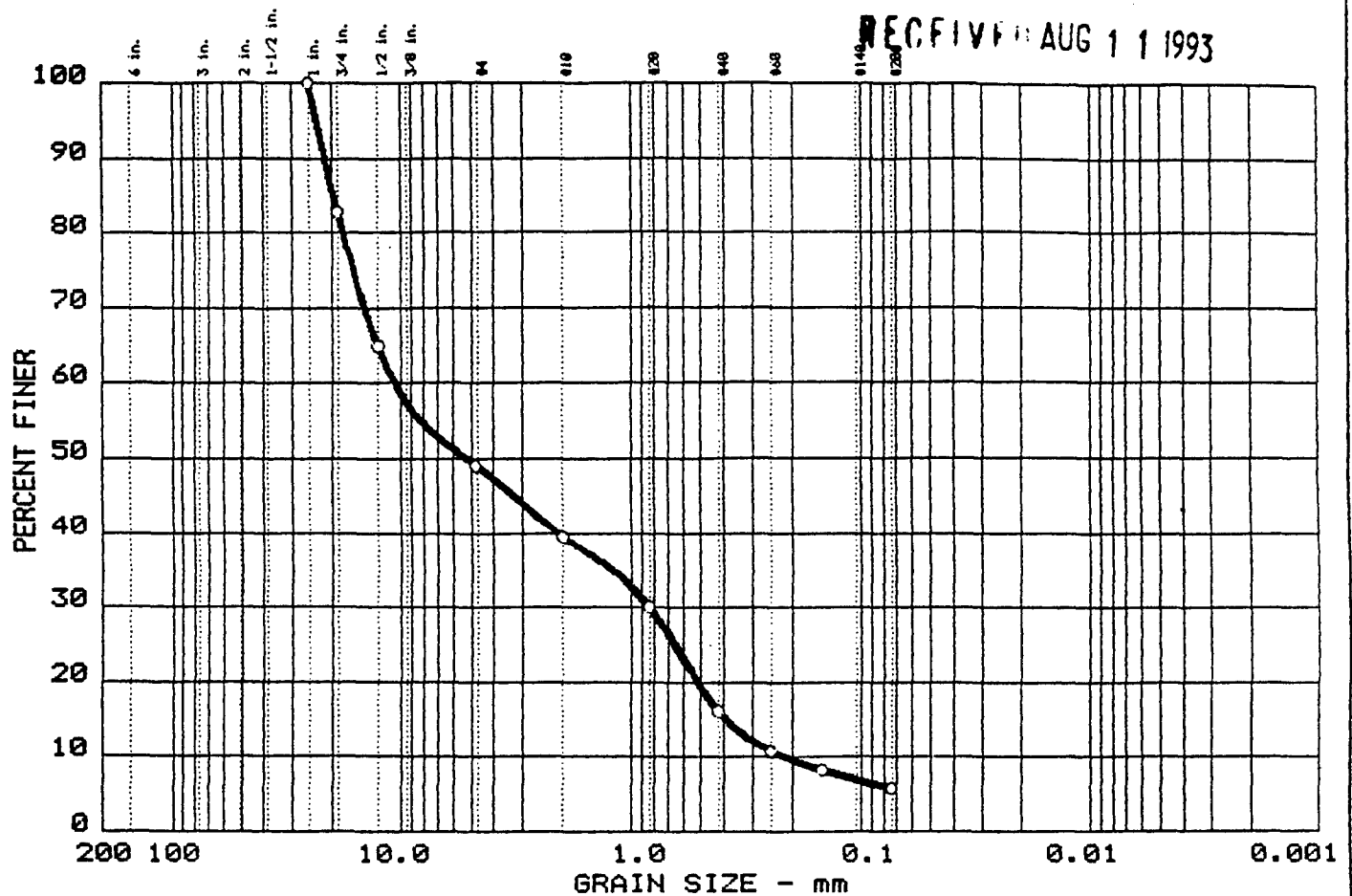
LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
--	--	19.61	1.49	1.02	0.539	0.3137	0.2407	0.81	6.2

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND with Gravel	SP	-- --

Project No.: 06917-05 Project: Fort Devens SI Groups 3,5 & 6 ○ Location: Ayer, MA Date: August 5, 1993	Remarks: Sample No. 38B-93-12X Depth 10.0'-12.0' Sta. BX381210 As rec'd w% = 2.6
GRAIN SIZE DISTRIBUTION TEST REPORT THE GEOTECHNICAL GROUP, INC.	SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT

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% +3"	% GRAVEL	% SAND	% FINES
0.0	50.9	43.4	5.7

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	19.82	10.64	5.15	0.836	0.3864	0.2148	0.31	49.5

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded GRAVEL with Sand and Silt	GP-GM	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 ○ Location: Ayer, MA

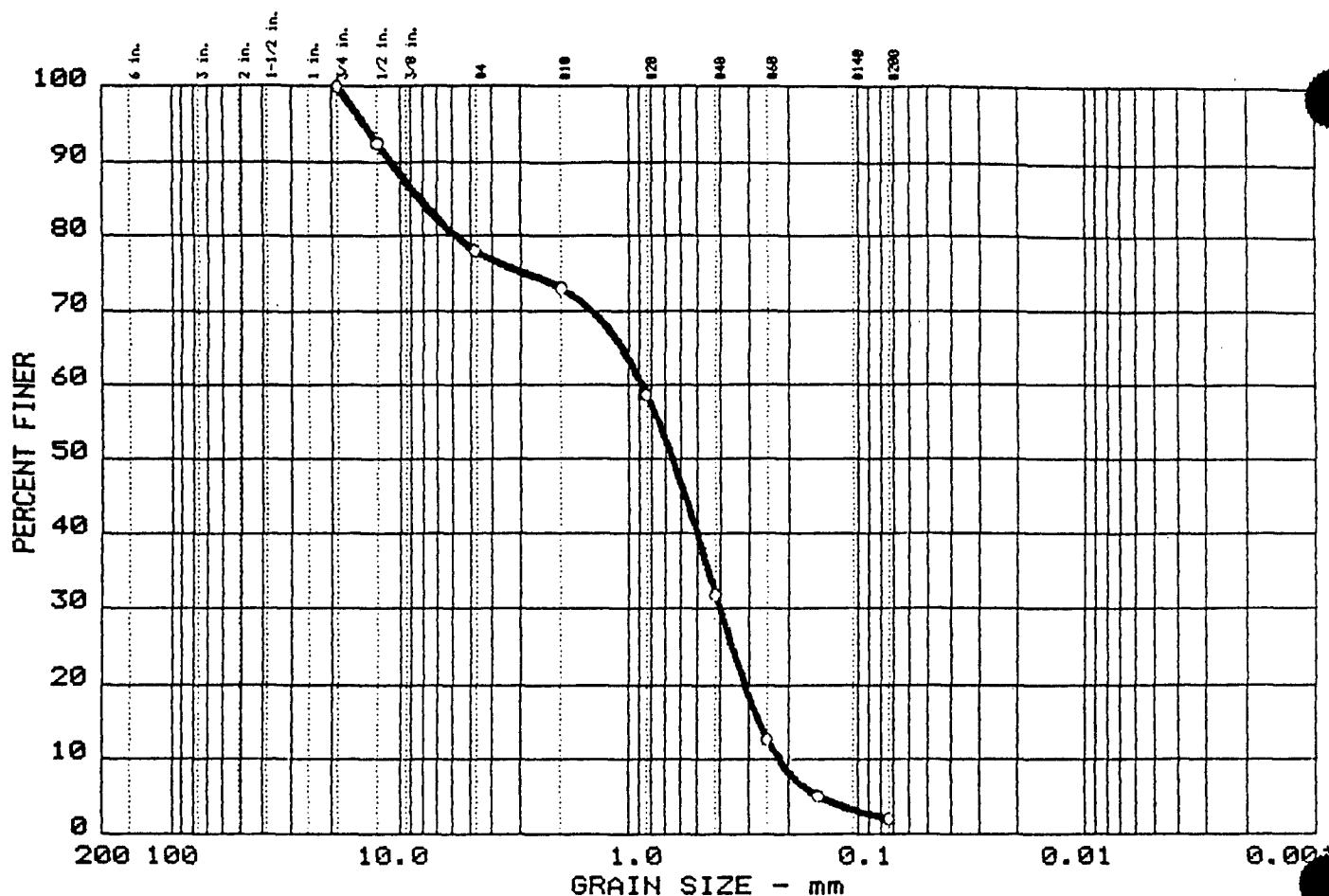
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 38B-93-15X
 Depth 10.0'-12.0'
 Sta. BX381510
 As rec'd w% = 2.6

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GRAIN SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% FINES
○	0.0	22.0	75.9	2.1

	LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
○	--	-- --	8.22	0.87	0.65	0.401	0.2704	0.2198	0.84	4.0

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND with Gravel	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 ○ Location: Ayer, MA

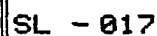
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 38B-93-18X
 Depth 5.0' - 7.0'
 Sta. BX381805
 As rec'd w% = 2.6

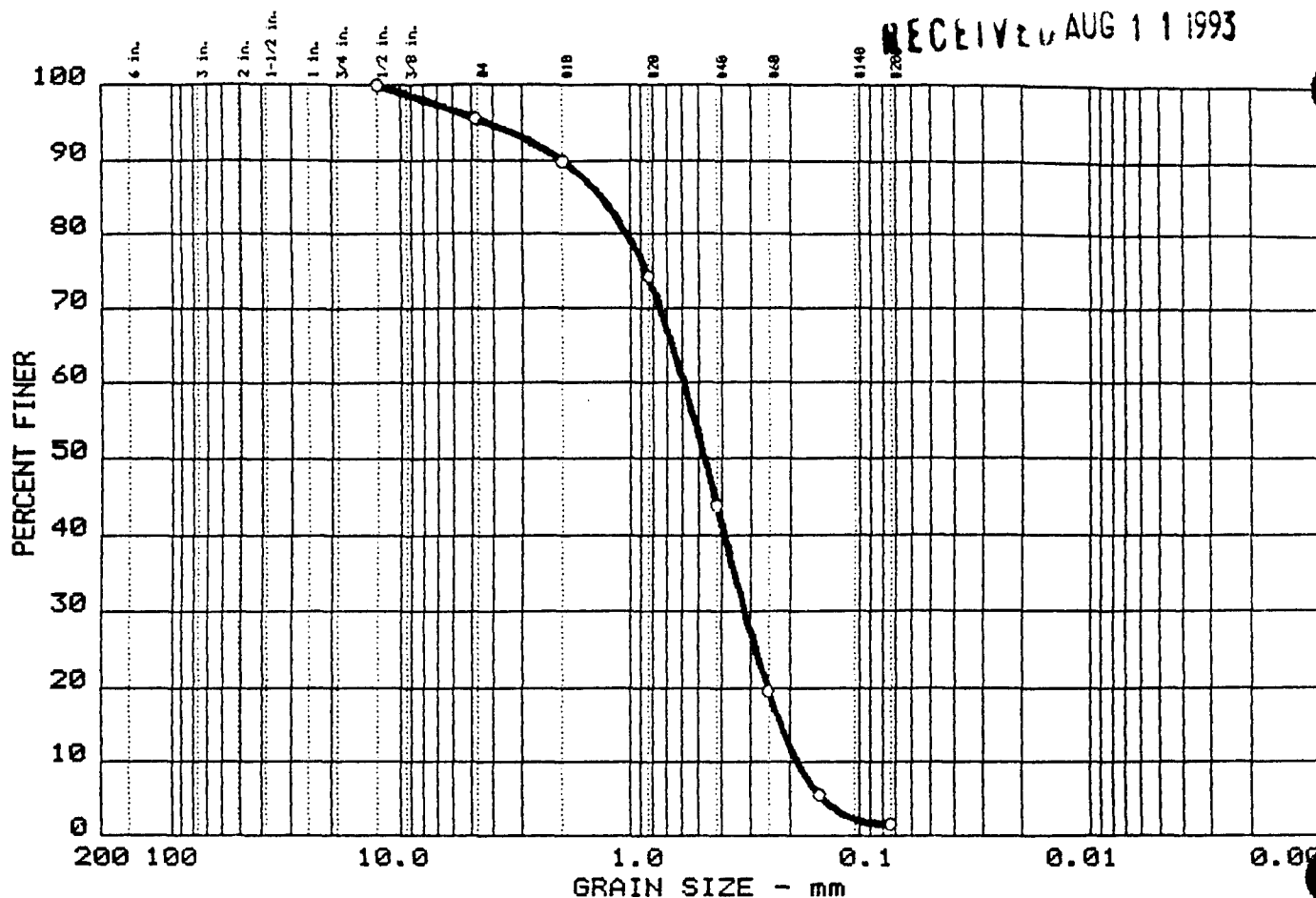
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GRAIN SIZE DISTRIBUTION TEST REPORT

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% +3"	% GRAVEL	% SAND	% FINES
0.0	4.4	94.0	1.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.32	0.59	0.47	0.317	0.2195	0.1847	0.93	3.2

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

Date: August 5, 1993

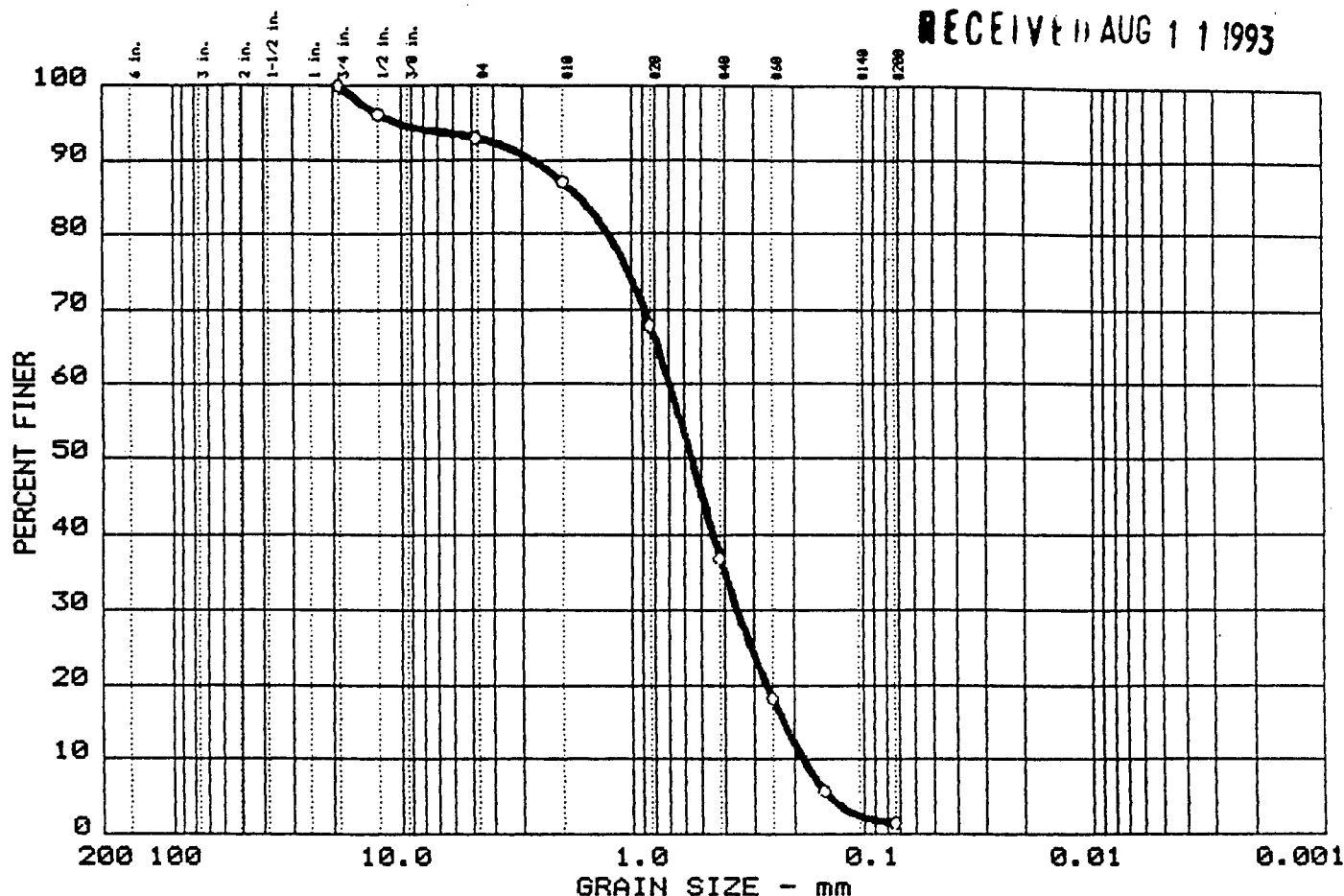
Remarks:
 Sample No. 38B-93-21X
 Depth 4.0' - 6.0'
 Sta. BX382104
 As rec'd w% = 3.5

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GRAIN SIZE DISTRIBUTION TEST REPORT

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% +3"	% GRAVEL	% SAND	% FINES
0.0	7.0	91.5	1.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	1.70	0.69	0.56	0.353	0.2226	0.1847	0.97	3.7

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 ○ Location: Ayer, MA

Date: August 5, 1993

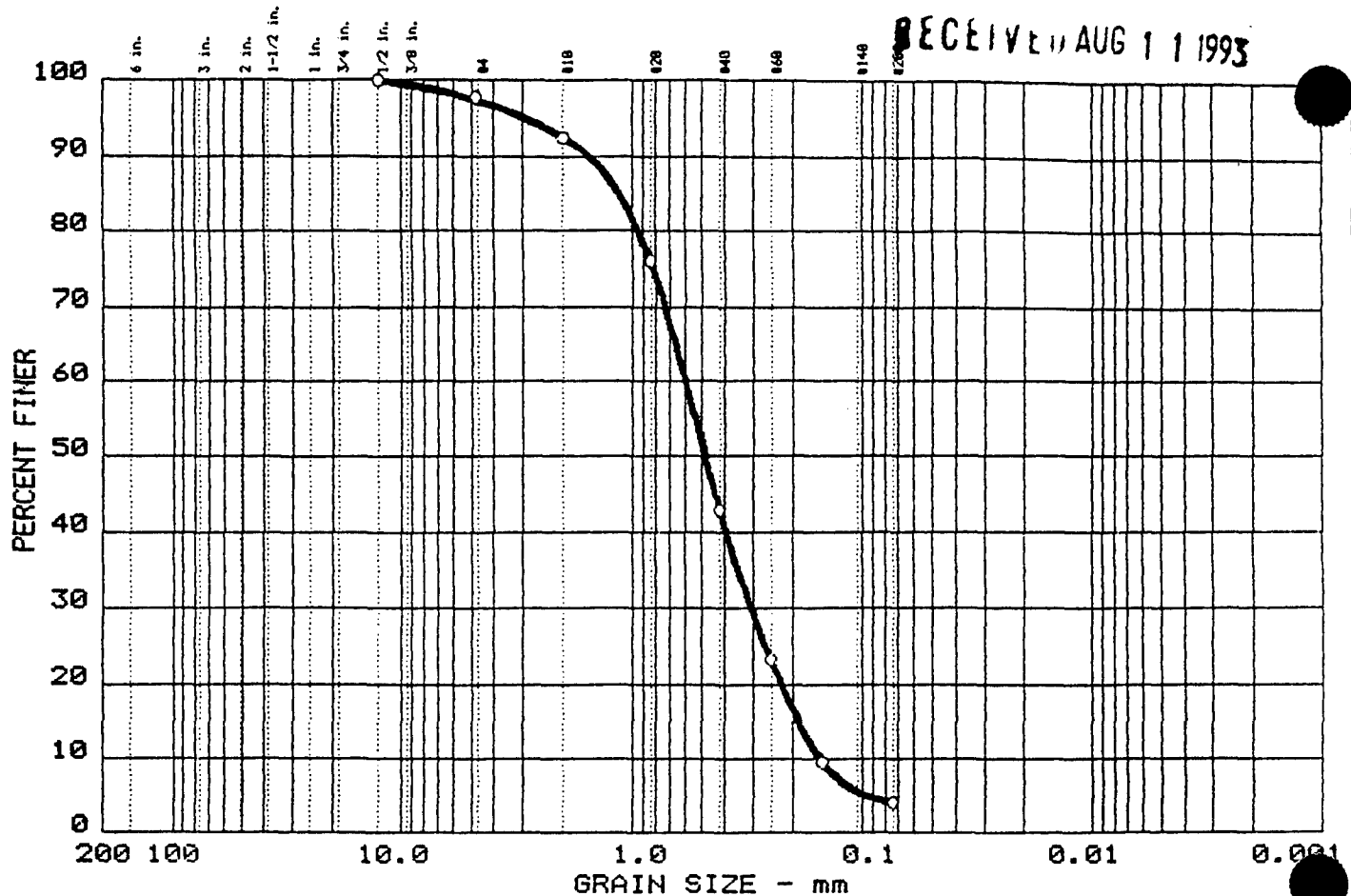
GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 38B-93-22X
 Depth 1.0' - 3.0'
 Sta. BX382201
 As rec'd w% = 2.4

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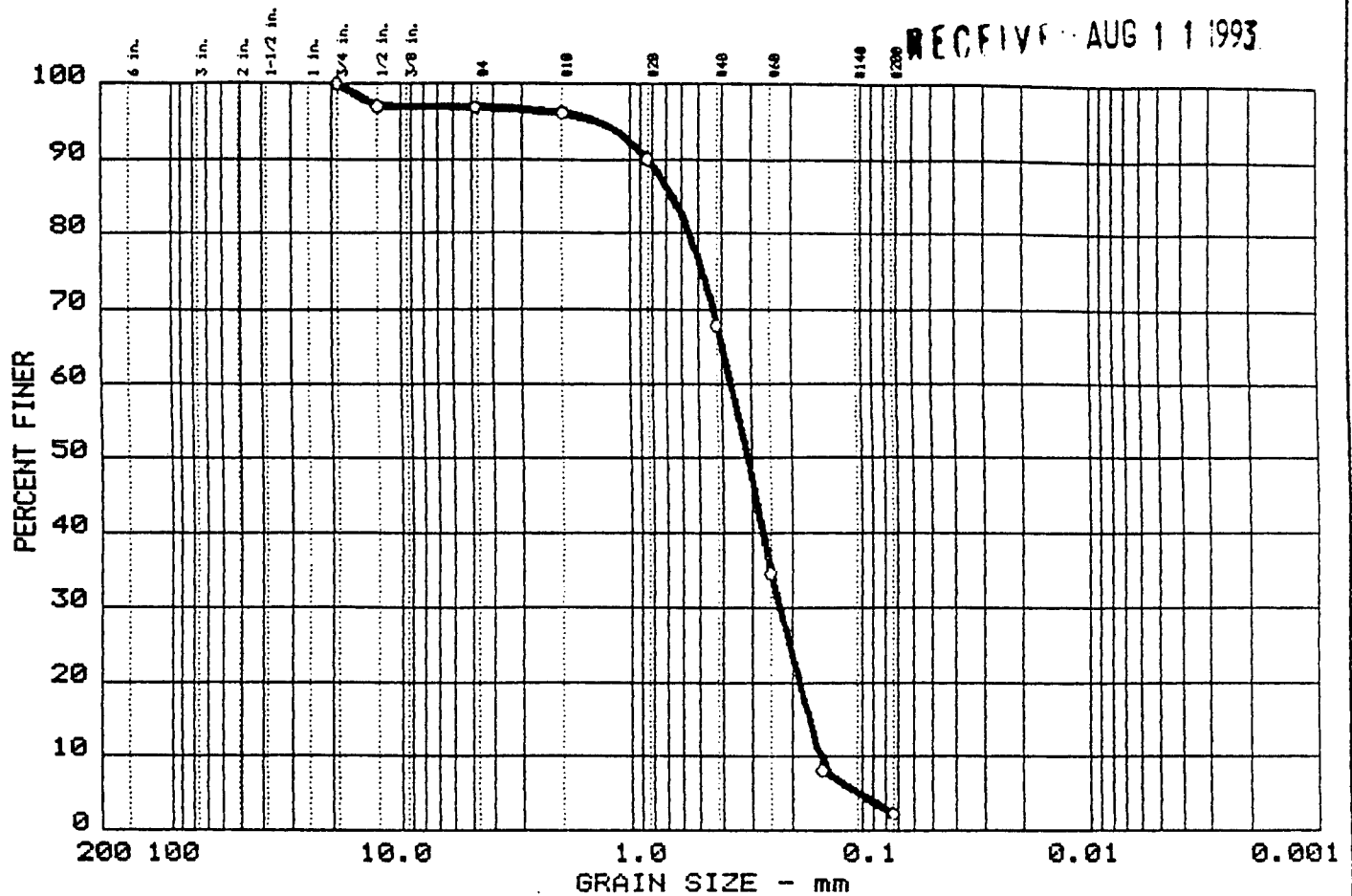
GRAIN SIZE DISTRIBUTION TEST REPORT

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GRAIN SIZE DISTRIBUTION TEST REPORT

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% +3"	% GRAVEL	% SAND	% FINES
0.0	3.0	94.7	2.3

LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
--	-- --	0.65	0.37	0.31	0.228	0.1702	0.1543	0.92	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

 Date: August 5, 1993

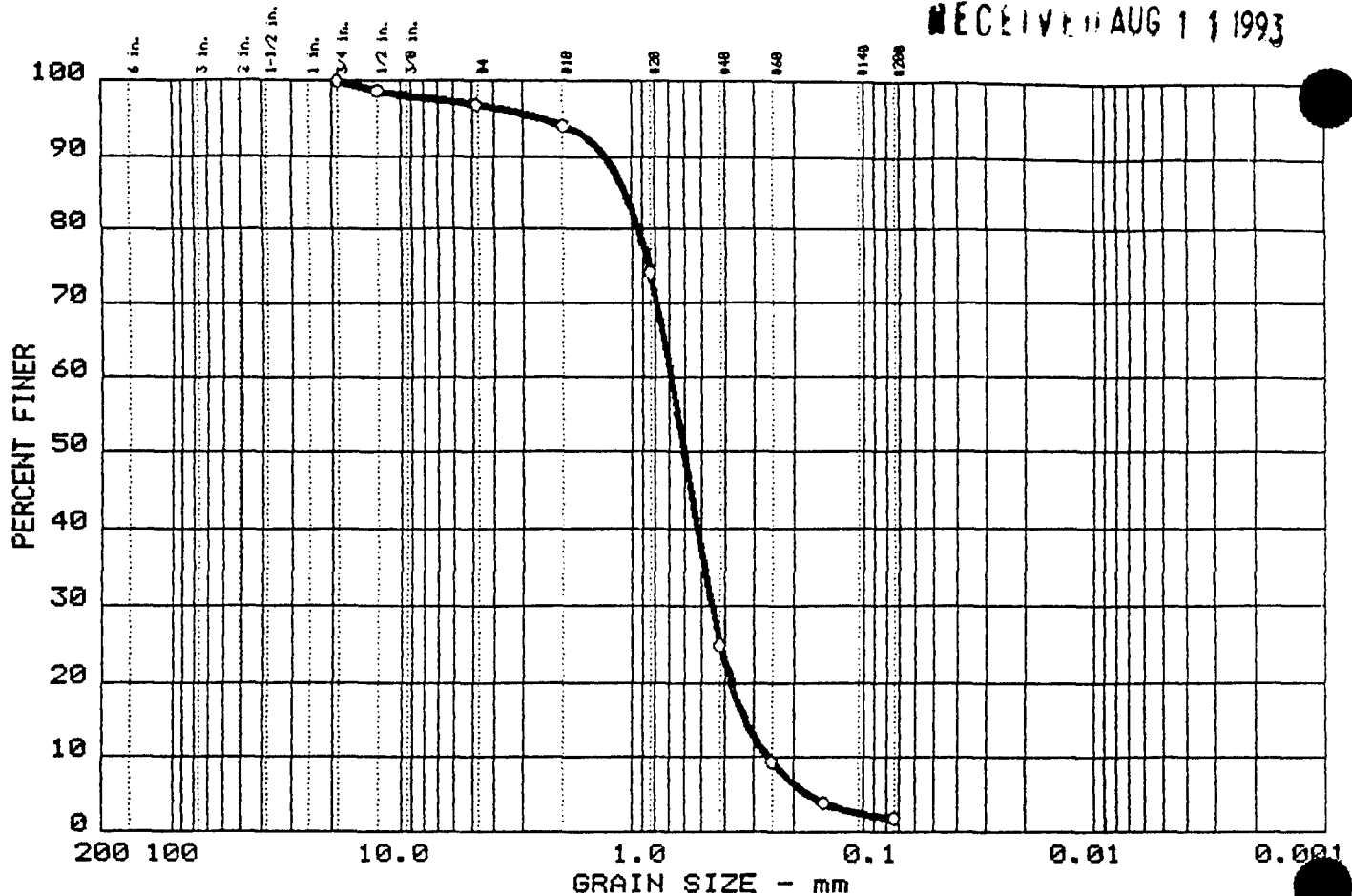
Remarks:
 Sample No. 38B-93-25X
 Depth 4.0' - 6.0'
 Sta. BX382504
 As rec'd w% = 3.3

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% +3"	% GRAVEL	% SAND	% FINES
0.0	3.1	95.0	1.9

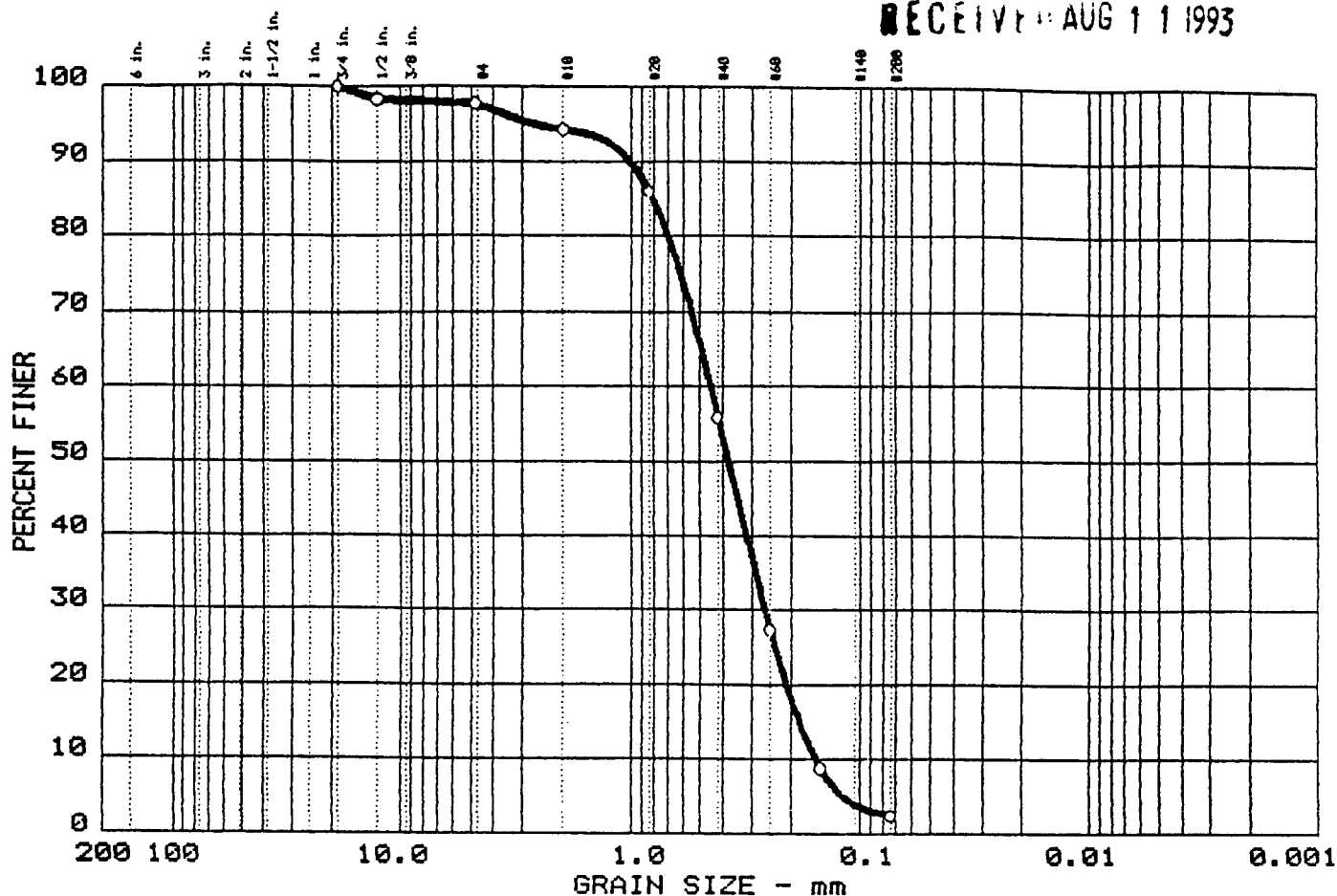
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	1.07	0.68	0.60	0.457	0.3273	0.2570	1.19	2.7

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	-- --

Project No.: 06917-05 Project: Fort Devens SI Groups 3,5 & 6 o Location: Ayer, MA Date: August 5, 1993	Remarks: Sample No. 38B-93-25X Depth 8.0'-10.0' Sta. BX382508 As rec'd w% = 3.6 SL - 017
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GRAIN SIZE DISTRIBUTION TEST REPORT

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% +3"	% GRAVEL	% SAND	% FINES
0.0	2.2	95.2	2.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	0.81	0.45	0.38	0.264	0.1847	0.1554	0.99	2.9

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 Location: Ayer, MA

Date: August 5, 1993

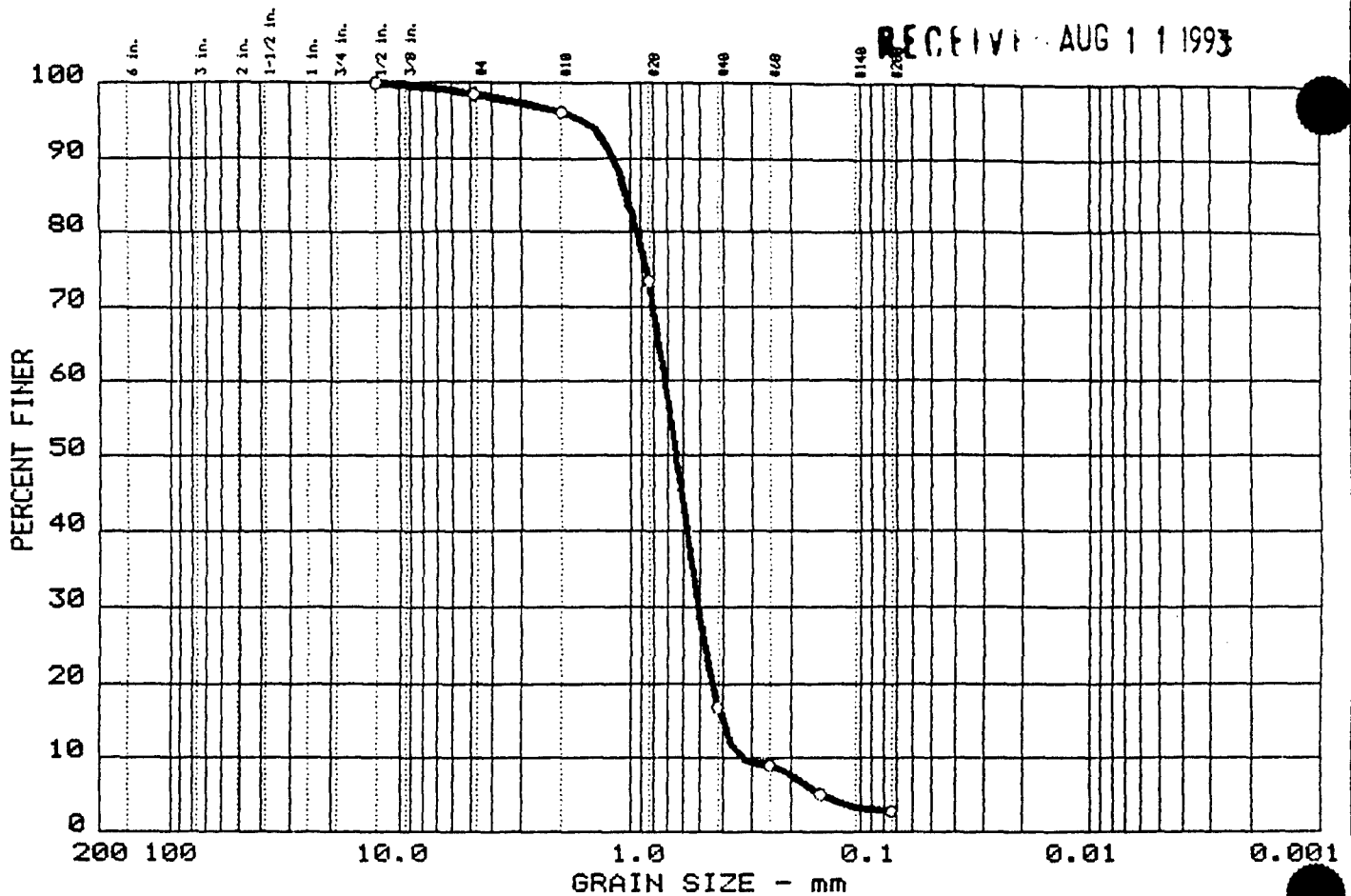
GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 38B-93-26X
 Depth 4.0' - 6.0'
 Sta. BX3826004
 As rec'd w% = 8.4

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% +3"	% GRAVEL	% SAND	% FINES
0.0	1.5	95.6	2.9

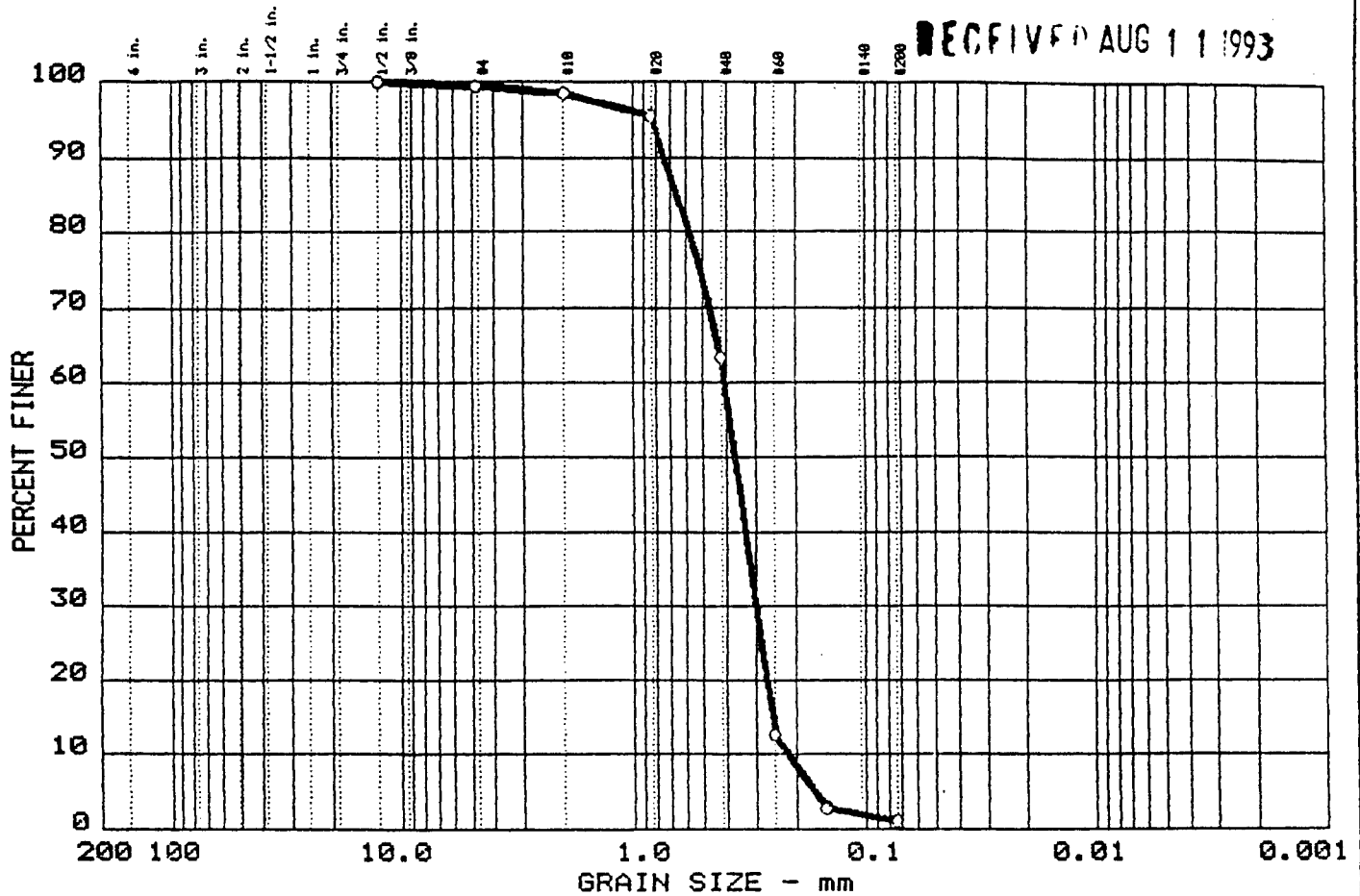
LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
--	--	1.03	0.71	0.64	0.511	0.4032	0.3203	1.15	2.2

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	-- --

<p>Project No.: 06917-05 Project: Fort Devens SI Groups 3,5 & 6 ○ Location: Ayer, MA</p> <p>Date: August 5, 1993</p>	<p>Remarks: Sample No. 44B-93-07X Depth 15.0'-17.0' Sta. BX440715 As rec'd w% = 8.4</p>
<p>GRAIN SIZE DISTRIBUTION TEST REPORT</p> <p>THE GEOTECHNICAL GROUP, INC.</p>	
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% +3"	% GRAVEL	% SAND	% FINES
0.0	0.6	98.2	1.2

LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
--	-- --	0.65	0.41	0.37	0.298	0.2559	0.2153	1.02	1.9

MATERIAL DESCRIPTION	USCS	AASHTO
o Poorly Graded SAND	SP	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

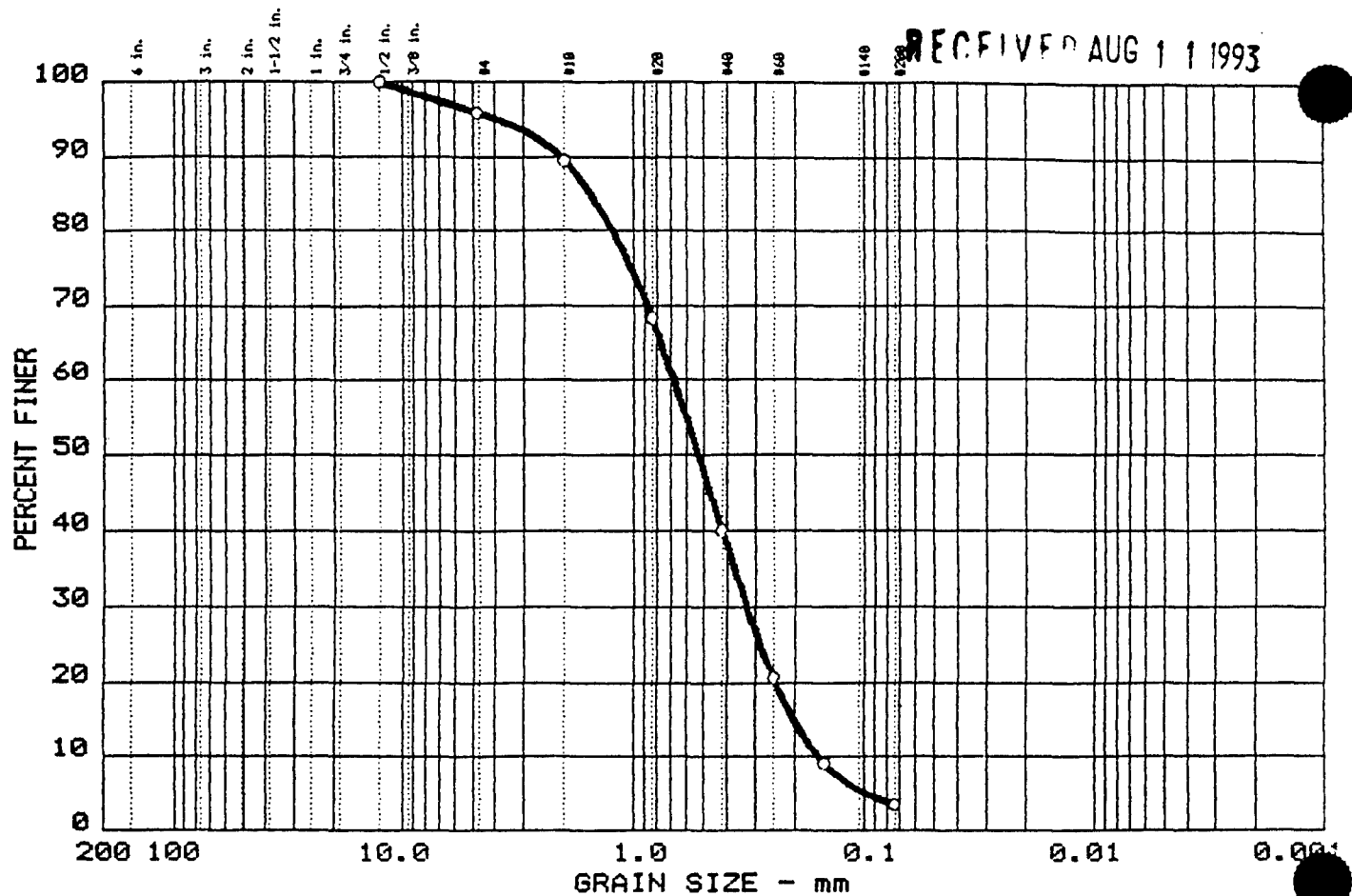
Date: August 5, 1993

Remarks:
 Sample No. 44B-93-09X
 Depth 9.0'-10.0'
 Sta. BX440909
 As rec'd w% = 4.7

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	4.0	92.4	3.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	1.53	0.67	0.53	0.327	0.2014	0.1563	1.01	4.3

MATERIAL DESCRIPTION	USCS	AASHTO
○ Poorly Graded SAND	SP	-- --

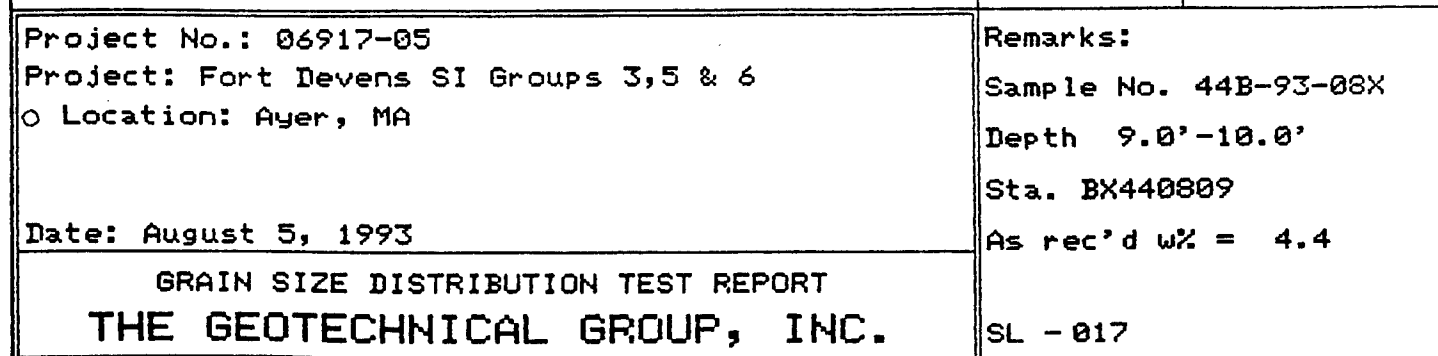
Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 Location: Ayer, MA
 Date: August 5, 1993

Remarks:
 Sample No. 44B-93-10X
 Depth 5.0' - 7.0'
 Sta. BX441005
 As rec'd w% = 4.7

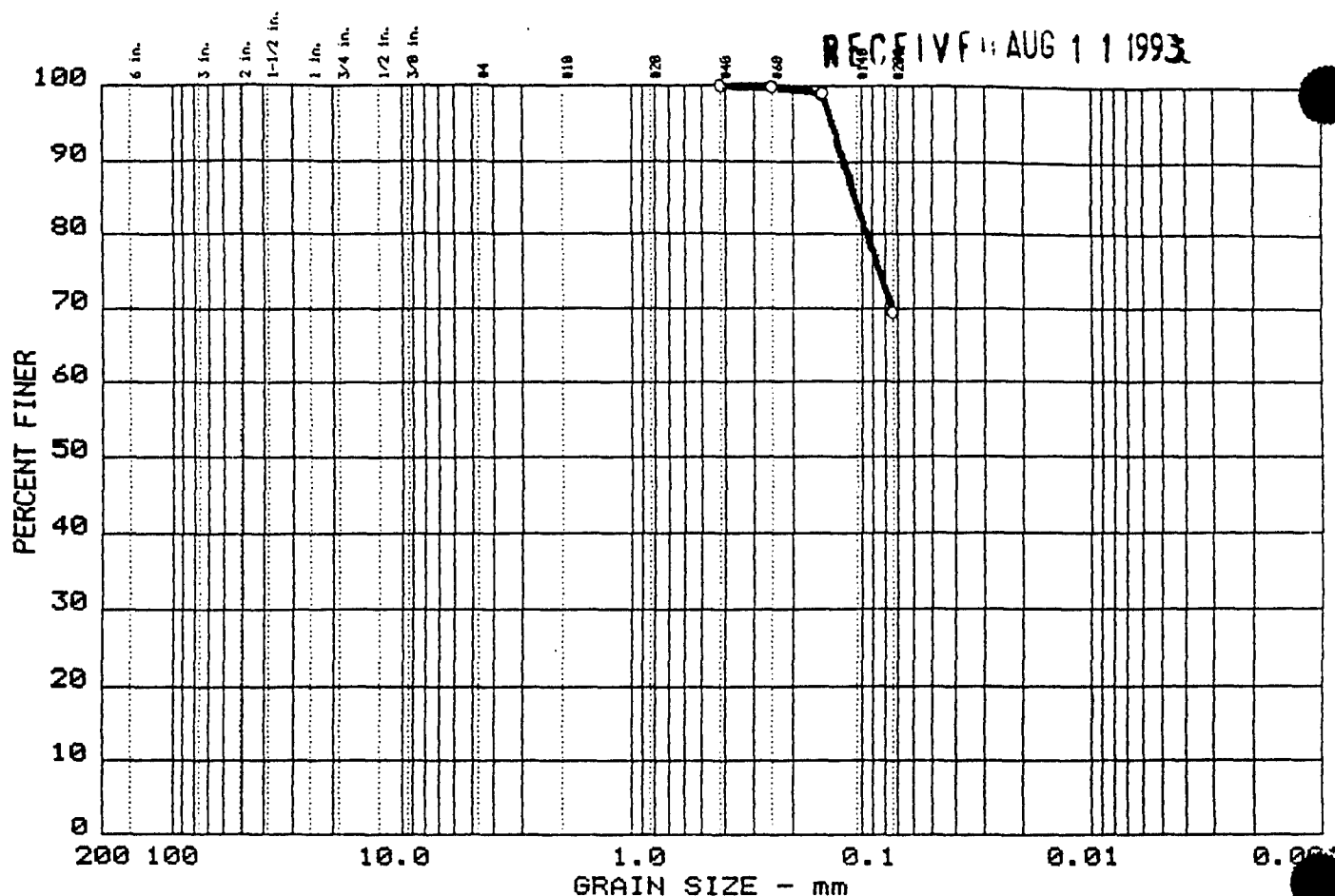
GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

SL - 017

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GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	30.6	69.4

LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
--	-- --	0.11							

MATERIAL DESCRIPTION	USCS	AASHTO
○ SILT with Sandy	ML	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 Location: Ayer, MA

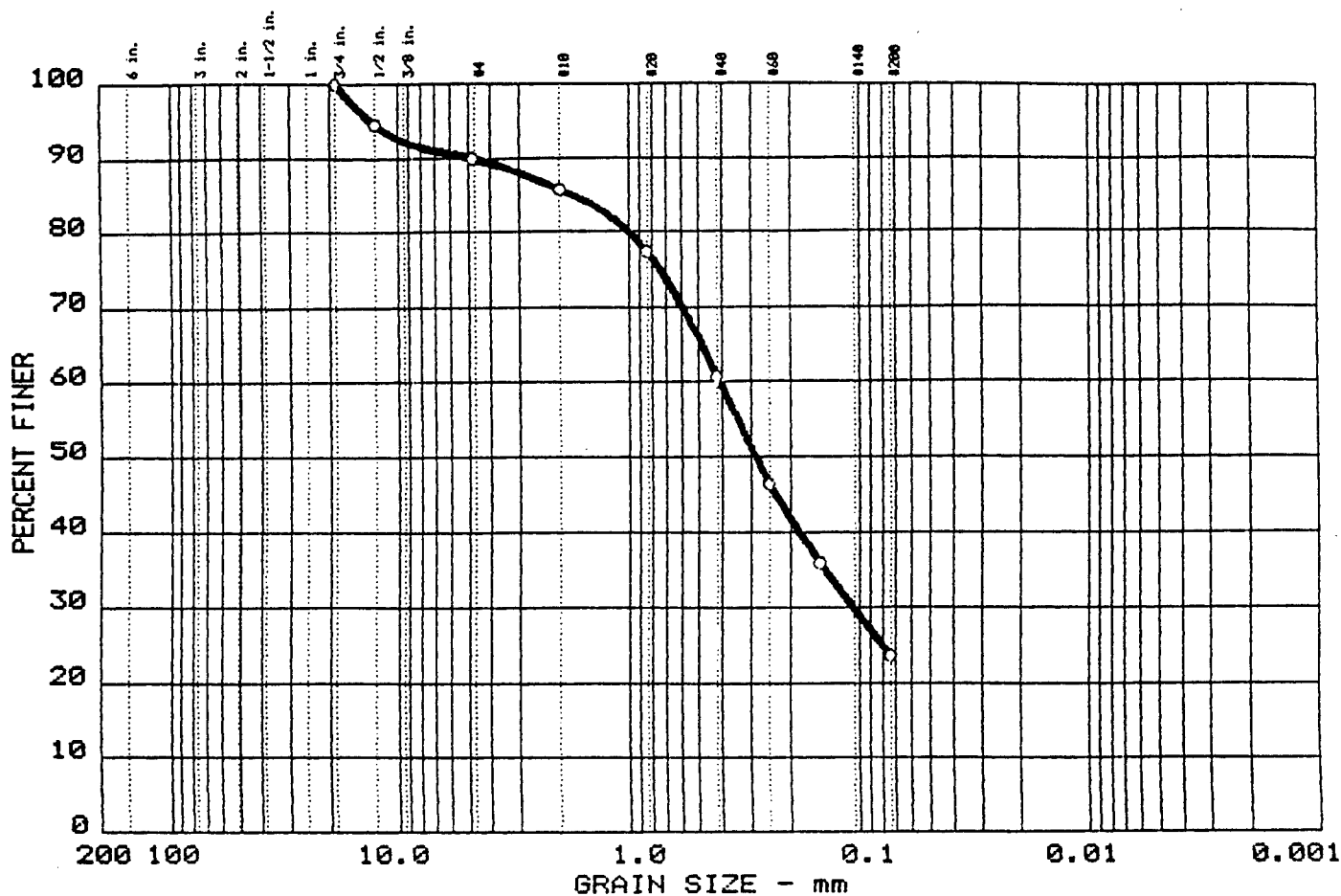
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. G6M-93-12X
 Depth 15.0'-17.0'
 Sta. BXG61215
 As rec'd w% = 4.4

SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	10.0	66.4	23.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	1.76	0.41	0.29	0.106				

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND	SM	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

Date: August 5, 1993

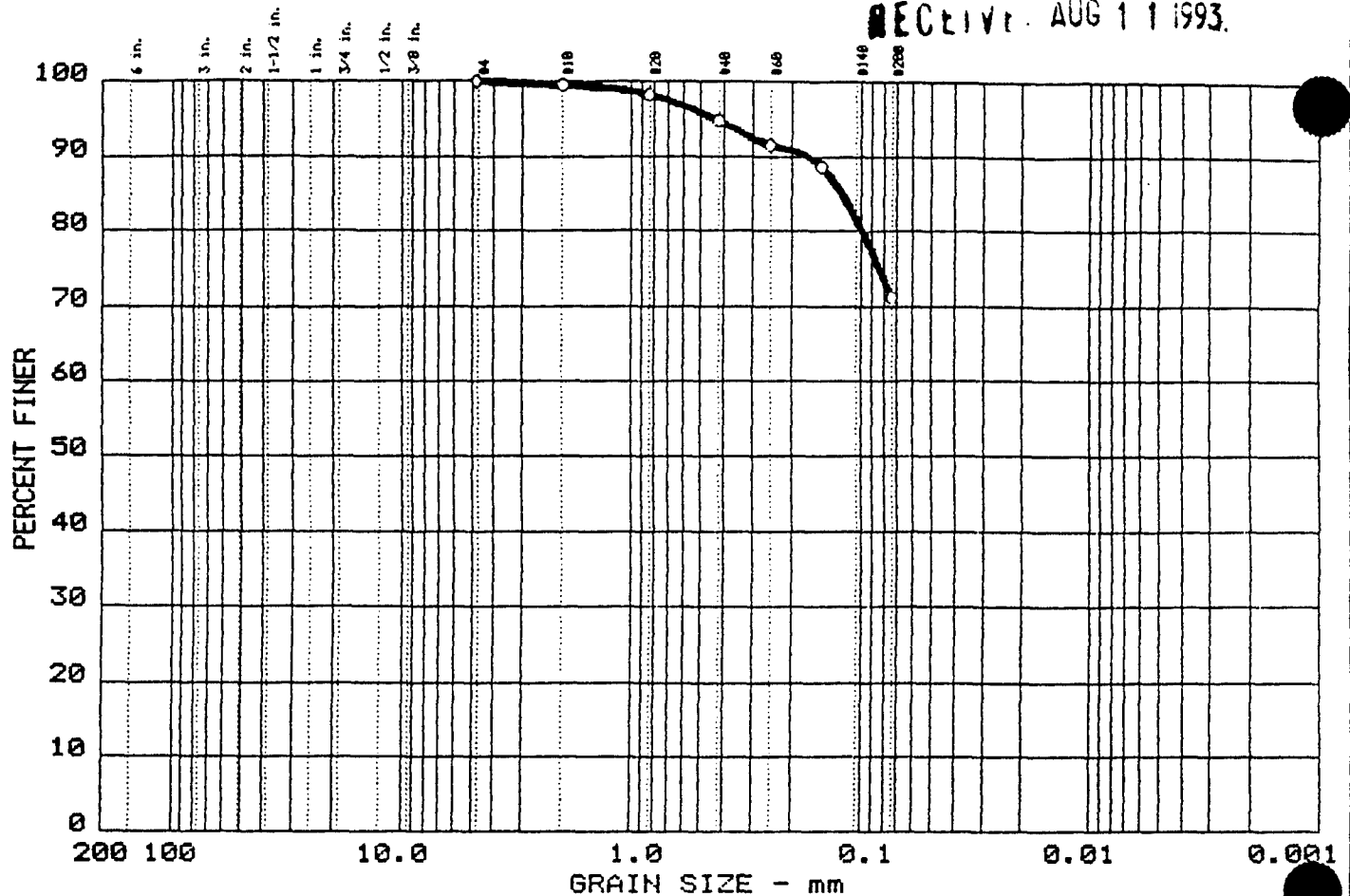
GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 50B-93-14X
 Depth 0.0' - 2.0'
 Sta. BX501400
 As rec'd w% = 9.8

SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT

RECEIVED: AUG 11 1993



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	28.8	71.2

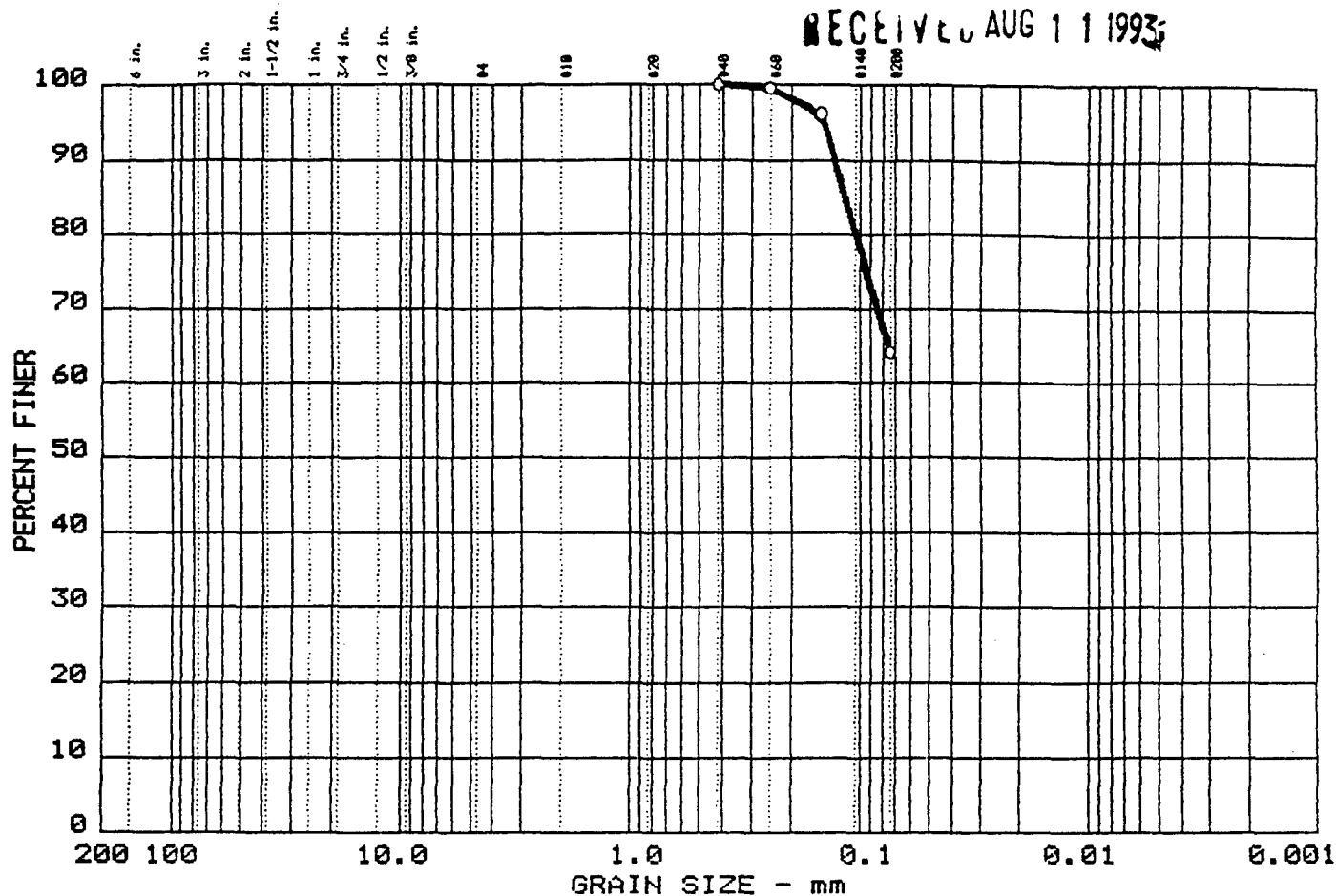
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	0.12							

MATERIAL DESCRIPTION	USCS	AASHTO
○ SILT	ML	-- --

Project No.: 06917-05 Project: Fort Devens SI Groups 3, 5 & 6 ○ Location: Ayer, MA Date: August 5, 1993	Remarks: Sample No. 50B-93-14X Depth 2.0' - 4.0' Sta. BX501402 As rec'd w% = 26.4
GRAIN SIZE DISTRIBUTION TEST REPORT THE GEOTECHNICAL GROUP, INC.	
SL - 017	

GRAIN SIZE DISTRIBUTION TEST REPORT

RECEIVED AUG 11 1993



	% +3"	% GRAVEL	% SAND	% FINES
0	0.0	0.0	35.6	64.2

	LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
0	--	-- --	0.12							

MATERIAL DESCRIPTION	USCS	AASHTO
0 SILT with Sand	ML	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 0 Location: Ayer, MA

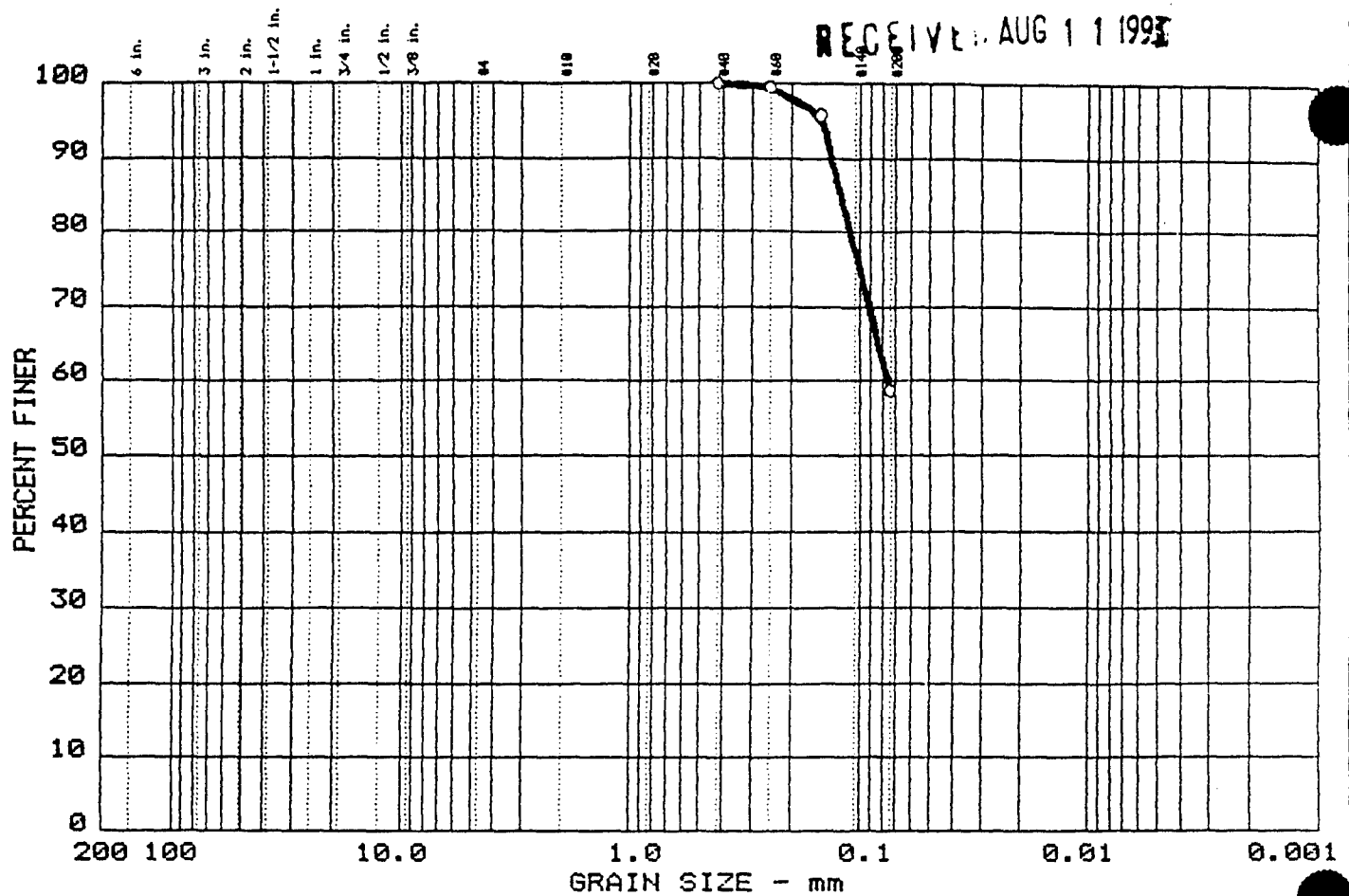
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 50B-93-14X
 Depth 4.0' - 6.0'
 Sta. BX501404
 As rec'd w% = 26.2
 SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT

RECEIVED: AUG 11 1993



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	41.2	58.8

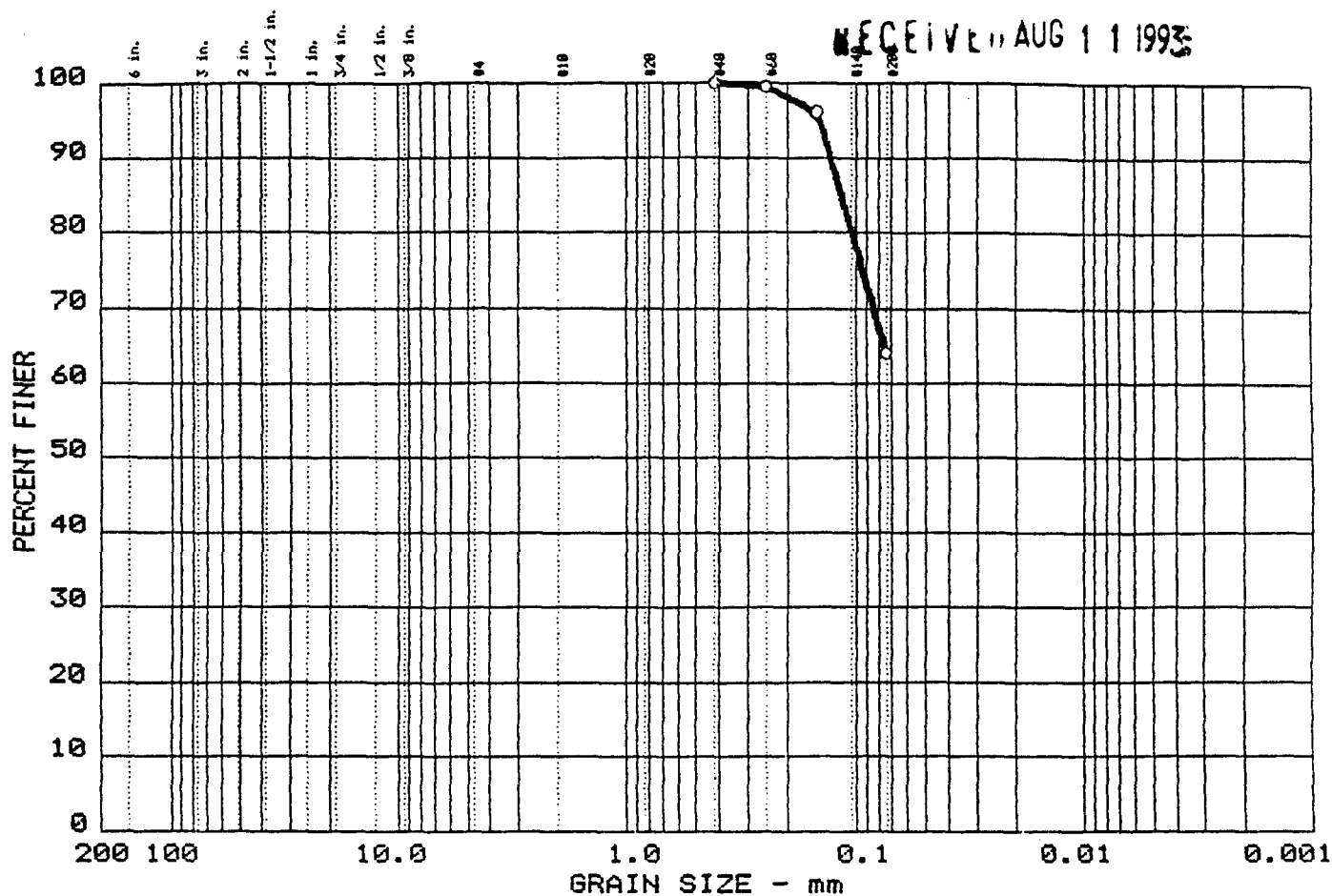
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	0.12	0.08						

MATERIAL DESCRIPTION	USCS	AASHTO
○ SILT with Sand	ML	-- --

Project No.: 06917-05 Project: Fort Devens SI Groups 3,5 & 6 ○ Location: Ayer, MA Date: August 5, 1993	Remarks: Sample No. 50B-93-14X Depth 10.0'-12.0' Sta. BX501410 As rec'd w% = 24.8 SL - 017
GRAIN SIZE DISTRIBUTION TEST REPORT THE GEOTECHNICAL GROUP, INC.	

GRAIN SIZE DISTRIBUTION TEST REPORT

RECEIVED AUG 11 1993



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	35.8	64.2

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	0.12							

MATERIAL DESCRIPTION	USCS	AASHTO
o SILT with Sand	ML	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

Date: August 5, 1993

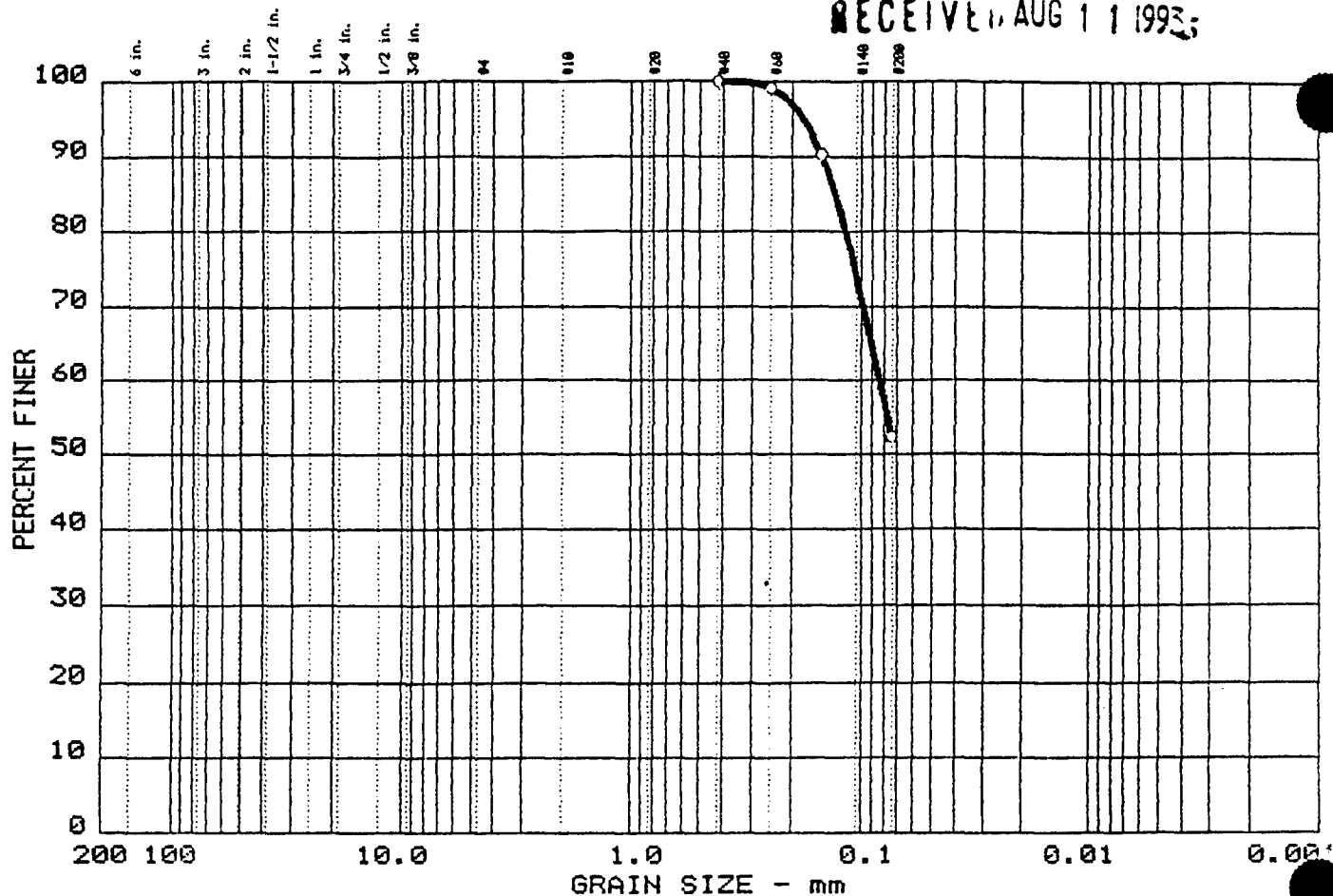
GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 50B-93-14X
 Depth 6.0' - 8.0'
 Sta. BX501406
 As rec'd w% = 26.4

SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT

RECEIVED AUG 11 1993



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	47.6	52.4

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.13	0.08						

MATERIAL DESCRIPTION	USCS	AASHTO
o SILT with Sand	ML	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

 Date: August 5, 1993

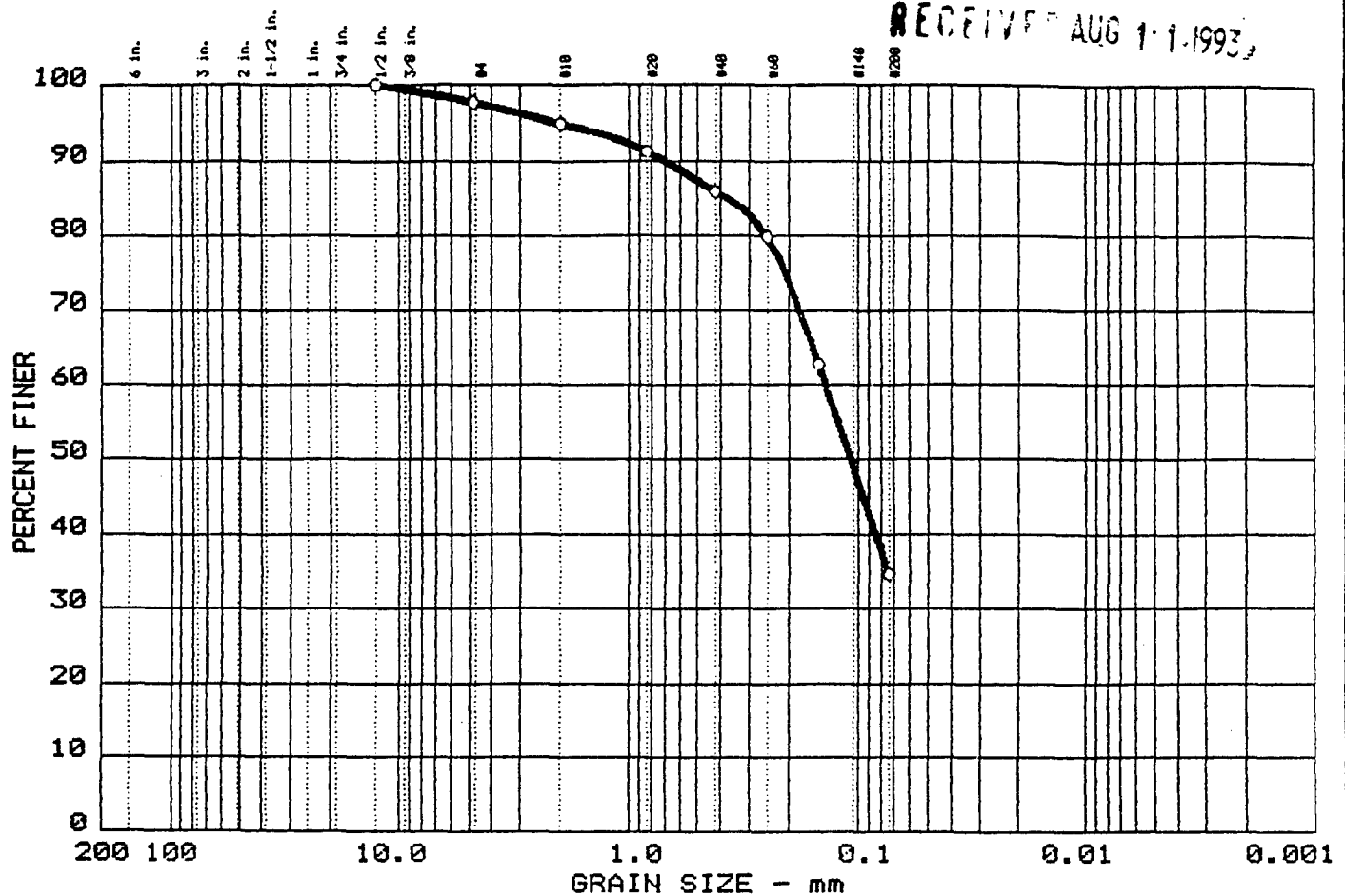
Remarks:
 Sample No. 50B-93-14X
 Depth 8.0'-10.0'
 Sta. BX501408
 As rec'd w% = 25.8

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT

RECEIVED AUG 11 1993



% +3"	% GRAVEL	% SAND	% FINES
0.0	2.3	63.1	34.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	-- --	0.37	0.14	0.11					

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND	SM	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

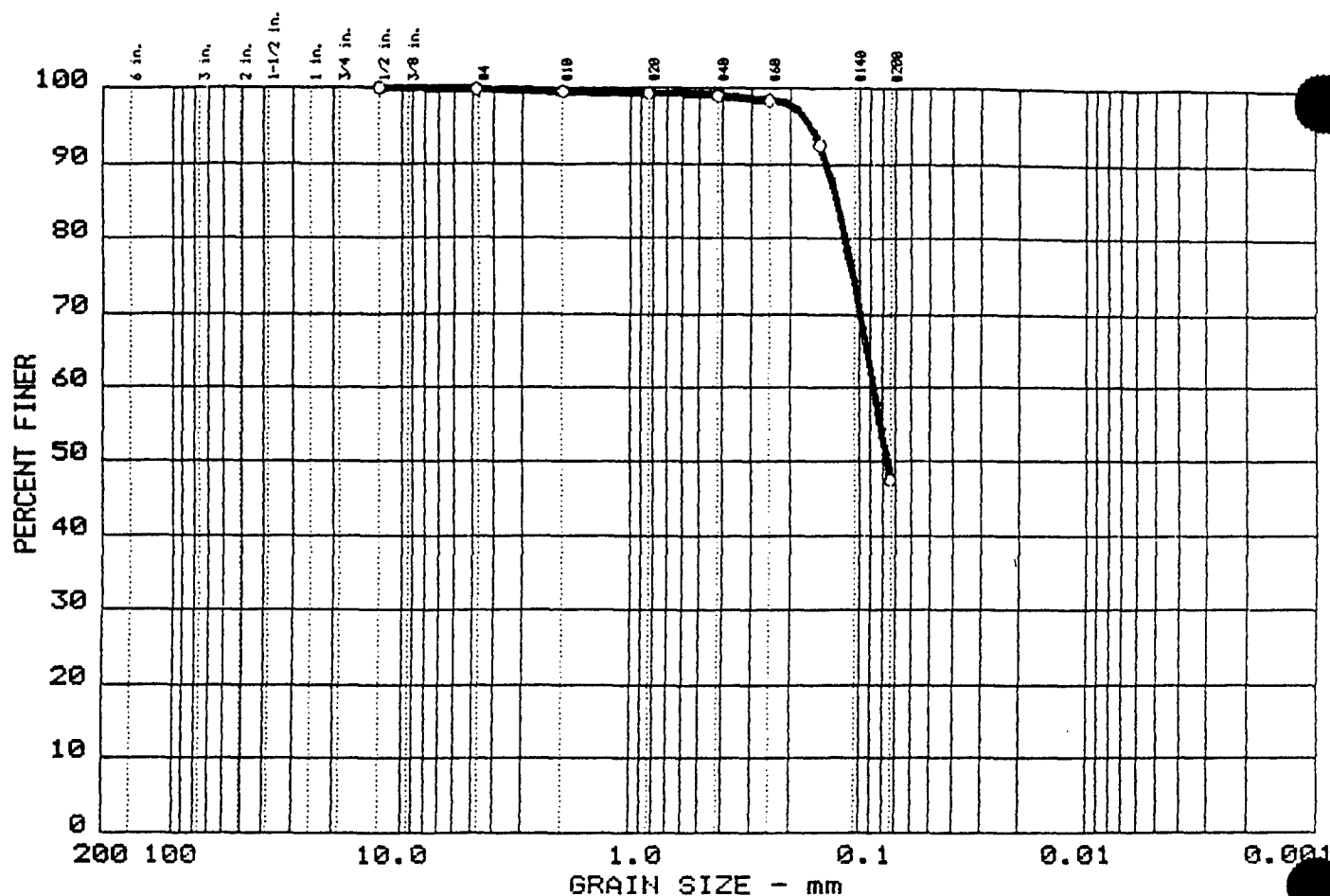
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 50B-93-11X
 Depth 5.0' - 7.0'
 Sta. BX501105
 As rec'd w% = 11.1

SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.1	52.4	47.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.13	0.09	0.08					

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND	SM	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

 Date: August 5, 1993

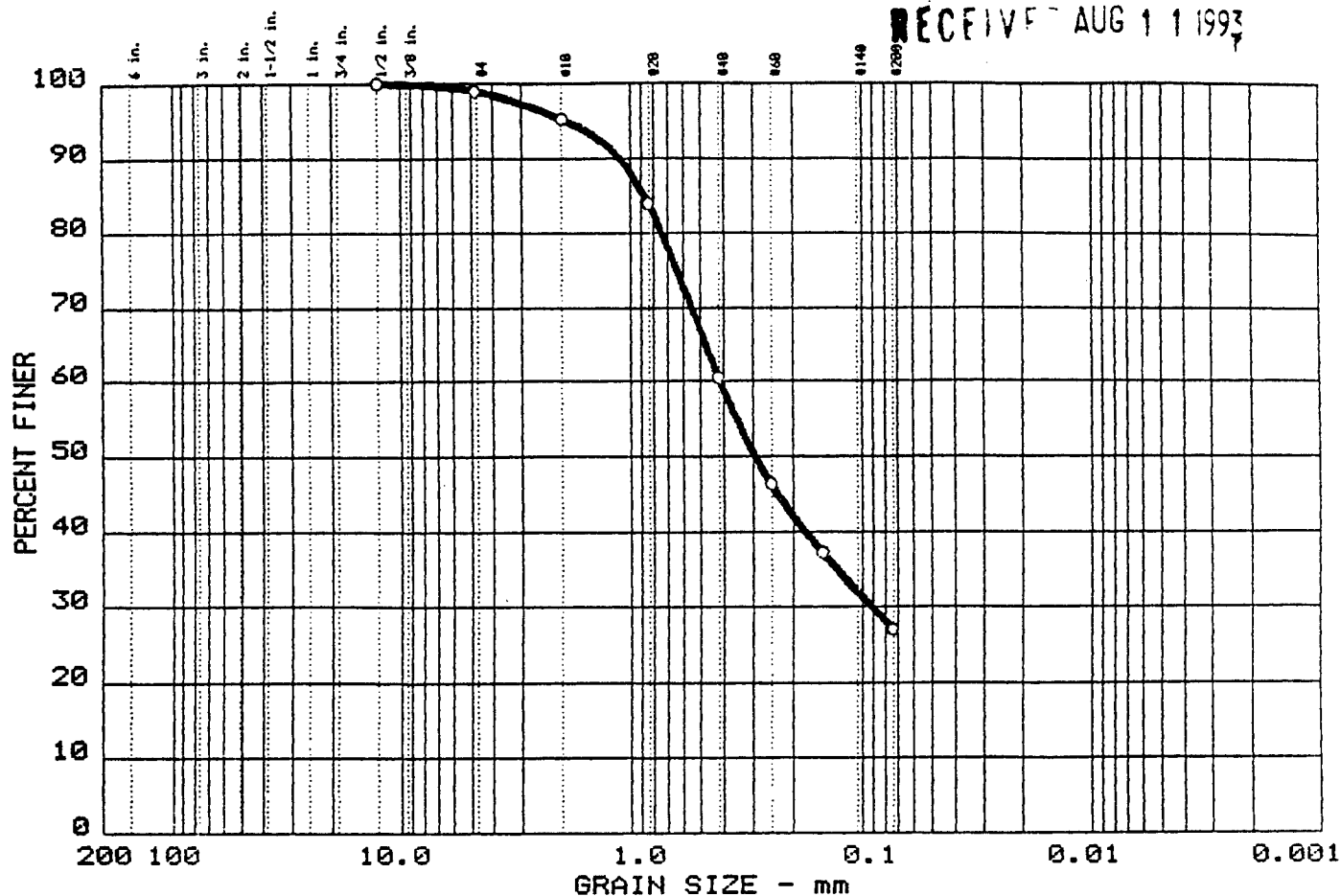
Remarks:
 Sample No. 50B-93-11X
 Depth 11.0'-12.0'
 Sta. BX501110
 As rec'd w% = 22.0

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

SL - 017

GRAIN SIZE DISTRIBUTION TEST REPORT

RECEIVED AUG 11 1993



% +3"	% GRAVEL	% SAND	% FINES
0.0	1.0	72.0	27.0

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
--	--	0.87	0.41	0.29	0.090				

MATERIAL DESCRIPTION	USCS	AASHTO
o Silty SAND (some organics)	SM	-- --

Project No.: 06917-05
 Project: Fort Devens SI Groups 3,5 & 6
 o Location: Ayer, MA

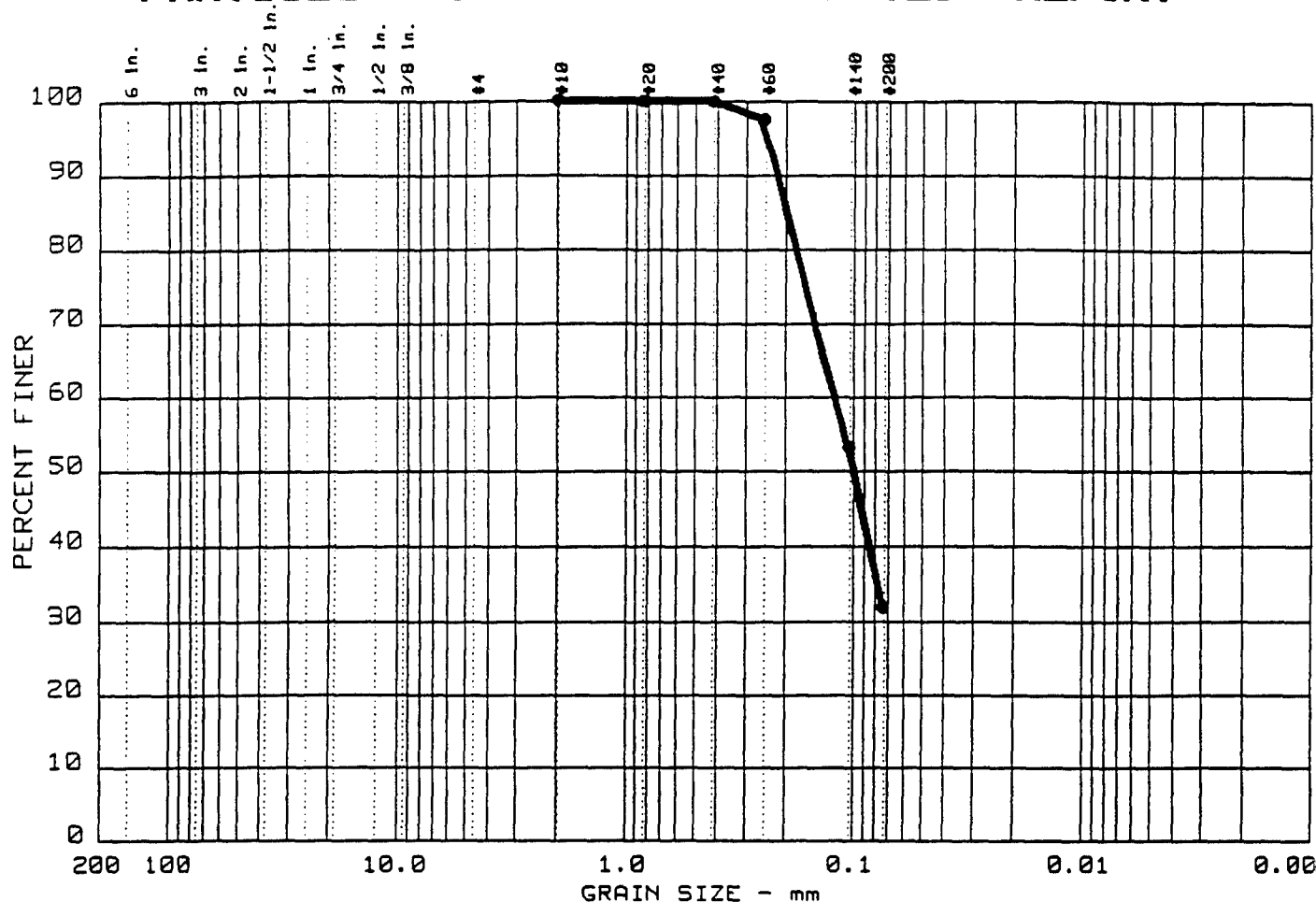
Date: August 5, 1993

GRAIN SIZE DISTRIBUTION TEST REPORT
 THE GEOTECHNICAL GROUP, INC.

Remarks:
 Sample No. 21B-93-01X
 Depth 1.2' - 1.6'
 Sta. BX210101
 As rec'd w% = 26.4

SL - 017

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	68.1	31.9		SM		

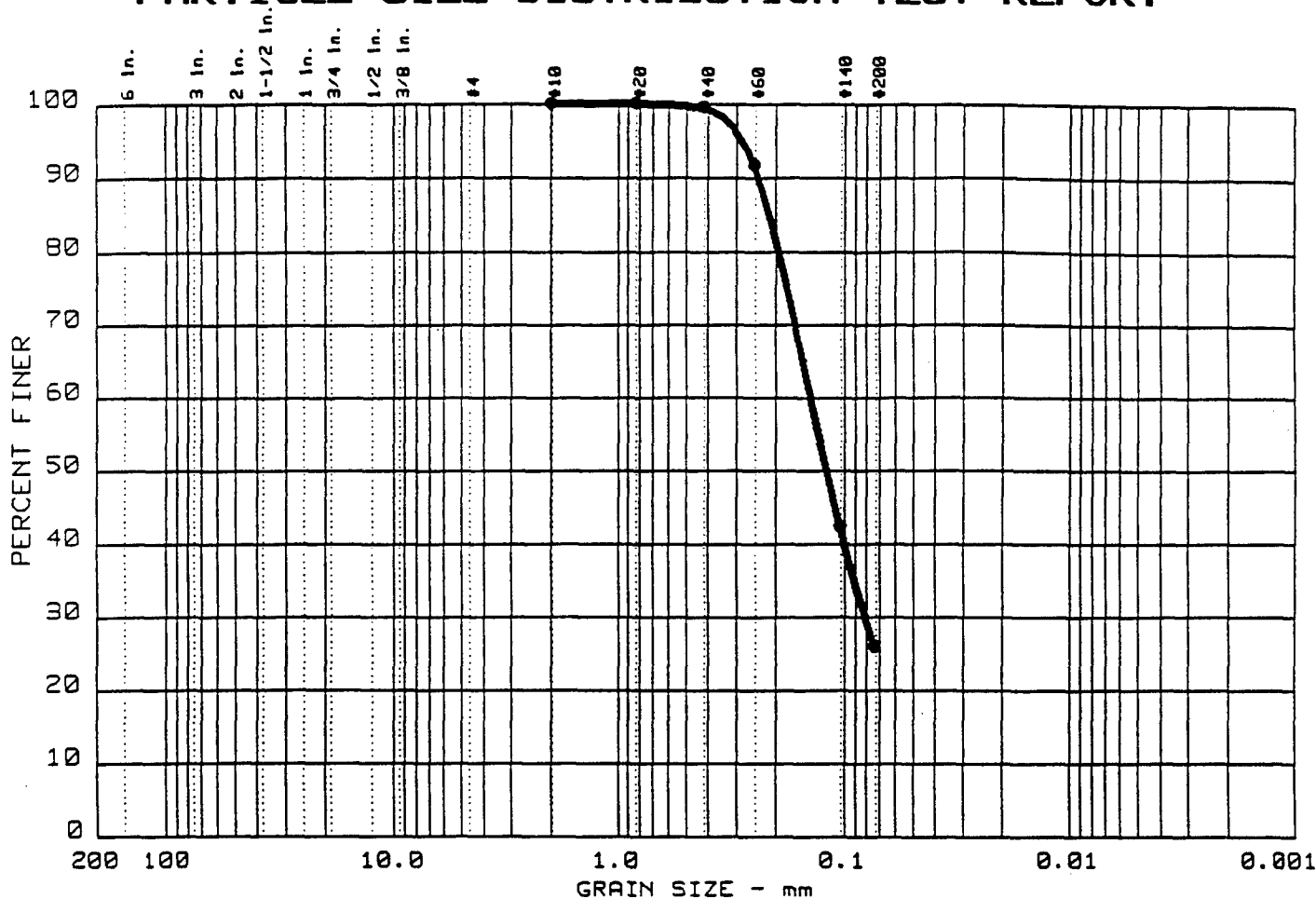
SIEVE inches size	PERCENT FINER			SIEVE number size	PERCENT FINER			Sample information: • BXG6 2038 Tan Clayey Remarks: Sieve analysis only
	•				•			
				10	100.0			
				20	100.0			
				40	99.9			
				60	97.5			
				140	53.2			
				200	31.9			
GRAIN SIZE								
D ₆₀	0.12							
D ₃₀								
D ₁₀								
COEFFICIENTS								
C _c								
C _u								

**ABB Environmental
Services, Inc.**

Project No.: 06917.13
 Project: SASO Phase III SI
 Date: 3/27/95

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PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	74.0	26.0		SM		

SIEVE inches size	PERCENT FINER		
	•		
GRAIN SIZE			
D ₆₀	0.14		
D ₃₀	0.08		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	•		
10	100.0		
20	100.0		
40	99.5		
60	91.8		
140	42.4		
200	26.0		

Sample information:

• BXG6 2036
Tan
Clayey

Remarks:
Sieve analysis only

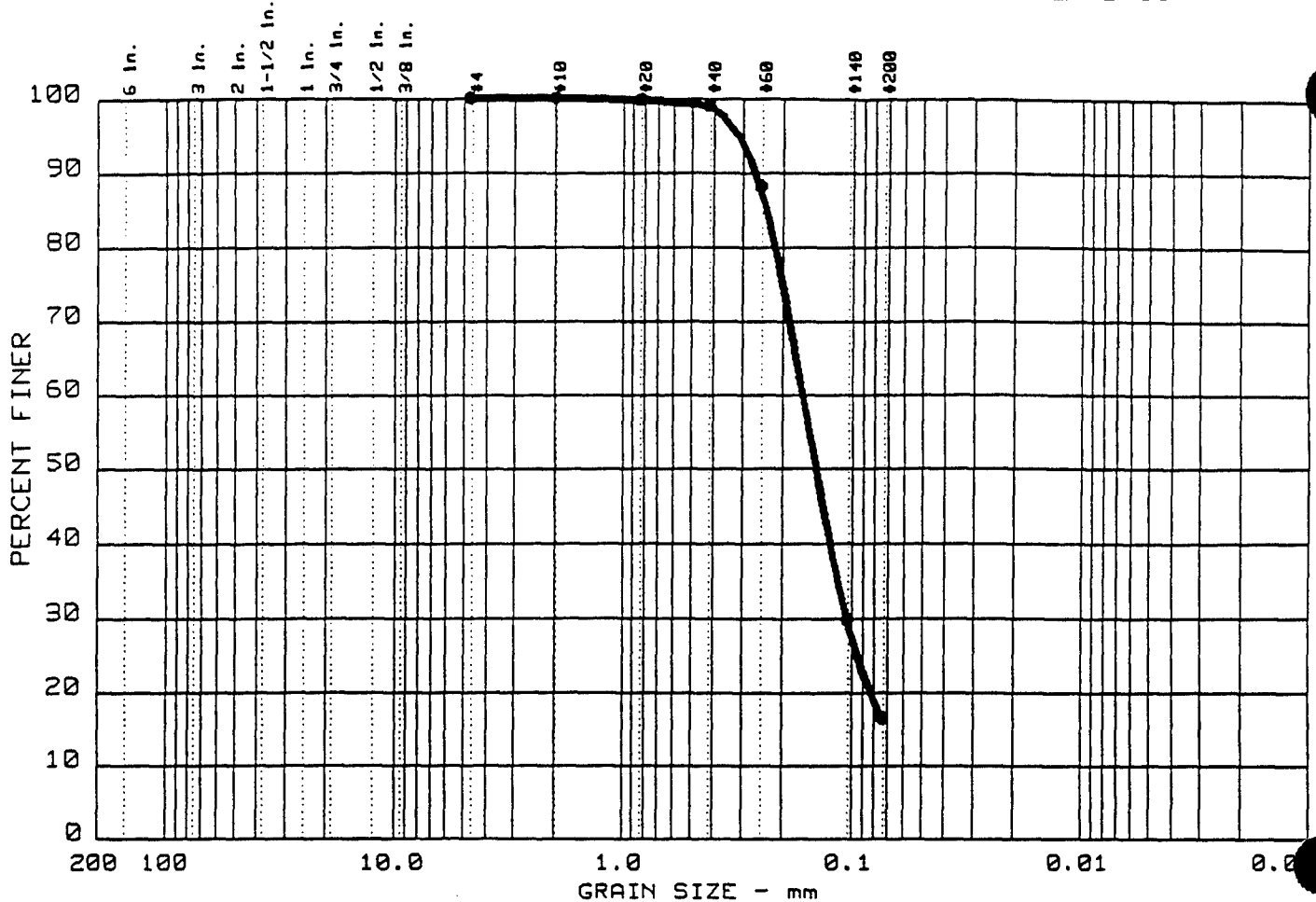
**ABB Environmental
Services, Inc.**

Project No.: 06917.13
Project: SA50 Phase III SI

Date: 3/17/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	83.5	16.5		SM		

SIEVE inches size	PERCENT FINER		
	●		
GRAIN SIZE			
D60	0.16		
D30	0.10		
D10			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
4	100.0		
10	100.0		
20	99.8		
40	99.0		
60	88.0		
140	29.9		
200	16.5		

Sample information:

● BXG6 2030
Tan

Remarks:

Sieve analysis only

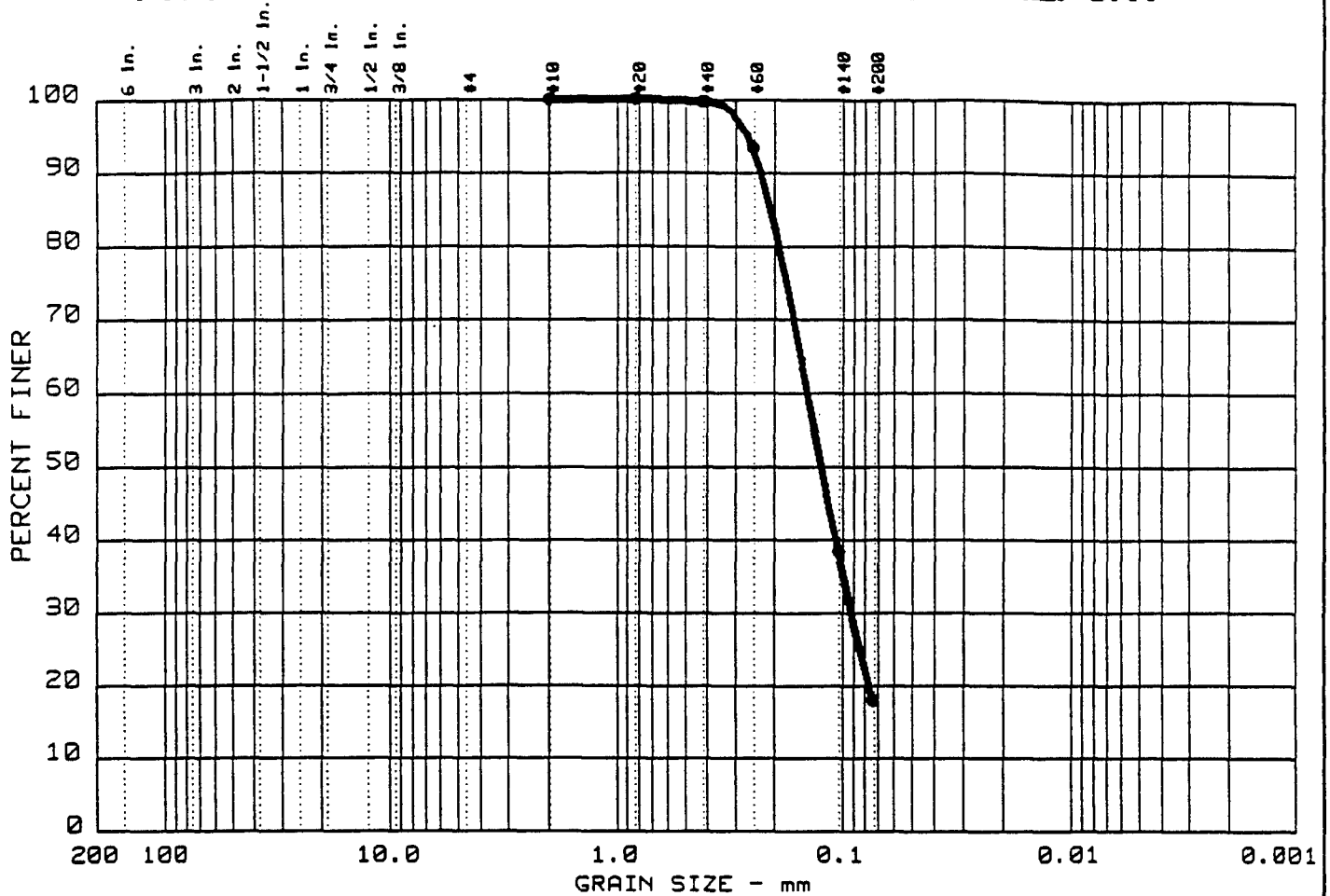
ABB Environmental Services, Inc.

Project No.: 06917.13
Project: SA50 Phase III SI

Date: 3/27/95

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	81.9	18.1		SM		

SIEVE inches size	PERCENT FINER		
	●		
GRAIN SIZE			
D ₆₀	0.14		
D ₃₀	0.09		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
10	100.0		
20	100.0		
40	99.6		
60	93.4		
140	38.4		
200	18.1		

Sample information:
 ● BXG6 2028
 Tan

Remarks:
 Sieve analysis only

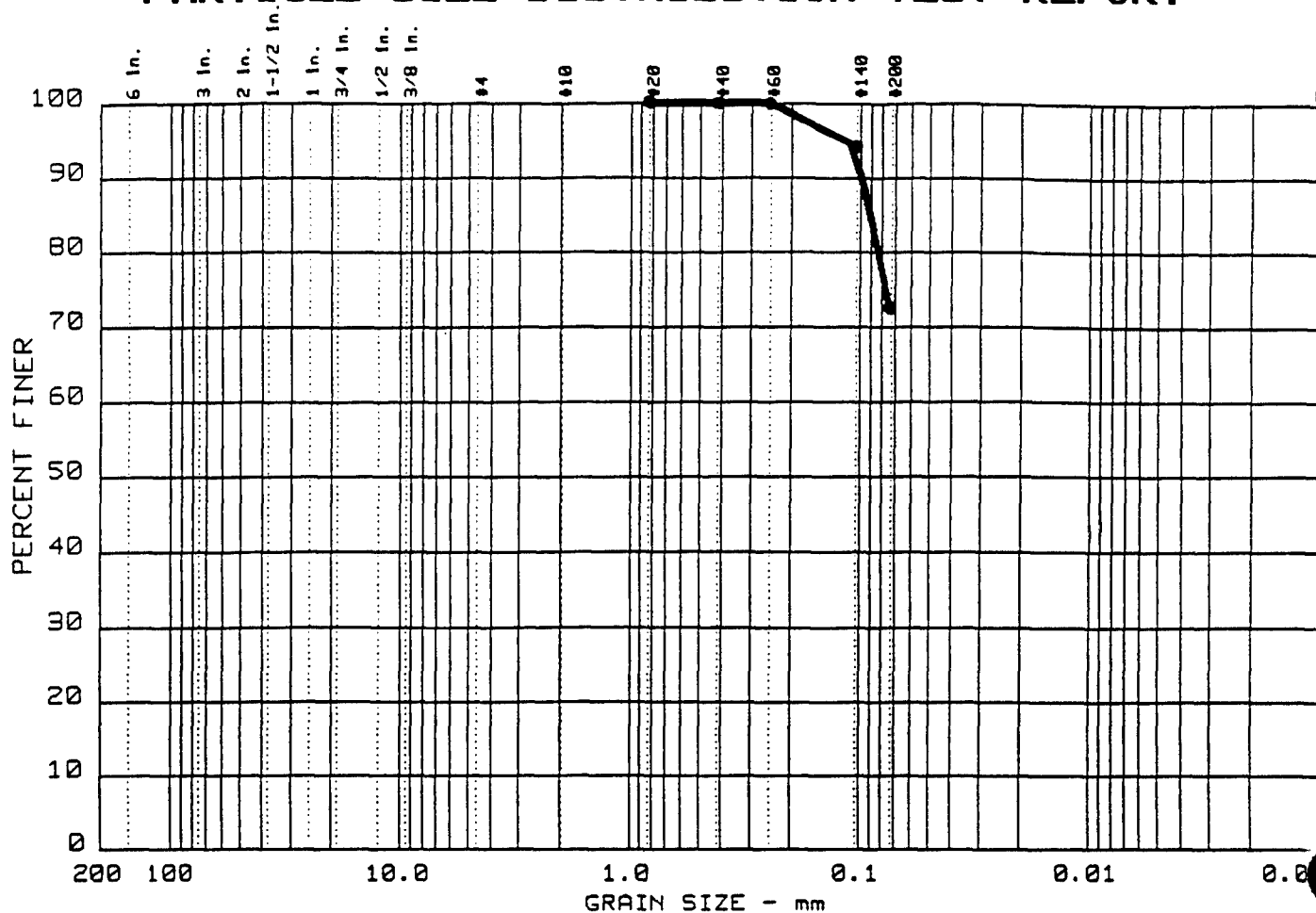
**ABB Environmental
Services, Inc.**

Project No.: 06917.13
 Project: SA50 Phase III SI

Date: 3/27/95

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PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	27.5	72.5		ML		

SIEVE inches size	PERCENT FINER		
	●		
GRAIN SIZE			
D ₆₀			
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
20	100.0		
40	100.0		
60	99.9		
140	94.2		
200	72.5		

Sample information:

● BXG6 2022
Tan
Clayey

Remarks:

Sieve analysis only

**ABB Environmental
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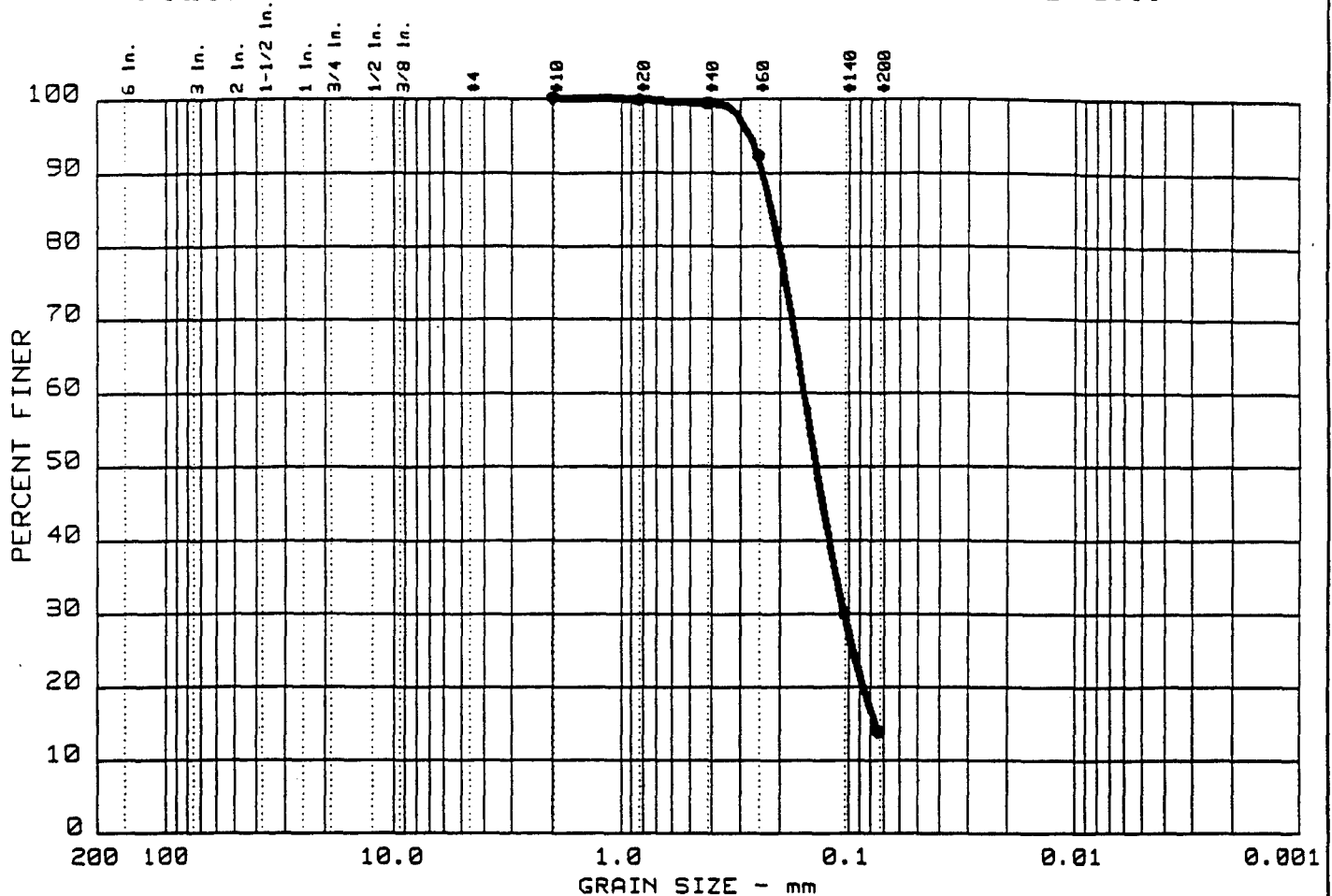
Project No.: 06917.13

Project: SA50 Phase III SI

Date: 3/28/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	86.0	14.0		SM		

SIEVE inches size	PERCENT FINER		
	●		
GRAIN SIZE			
D ₆₀	0.16		
D ₃₀	0.10		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
10	100.0		
20	99.8		
40	99.3		
60	92.2		
140	30.0		
200	14.0		

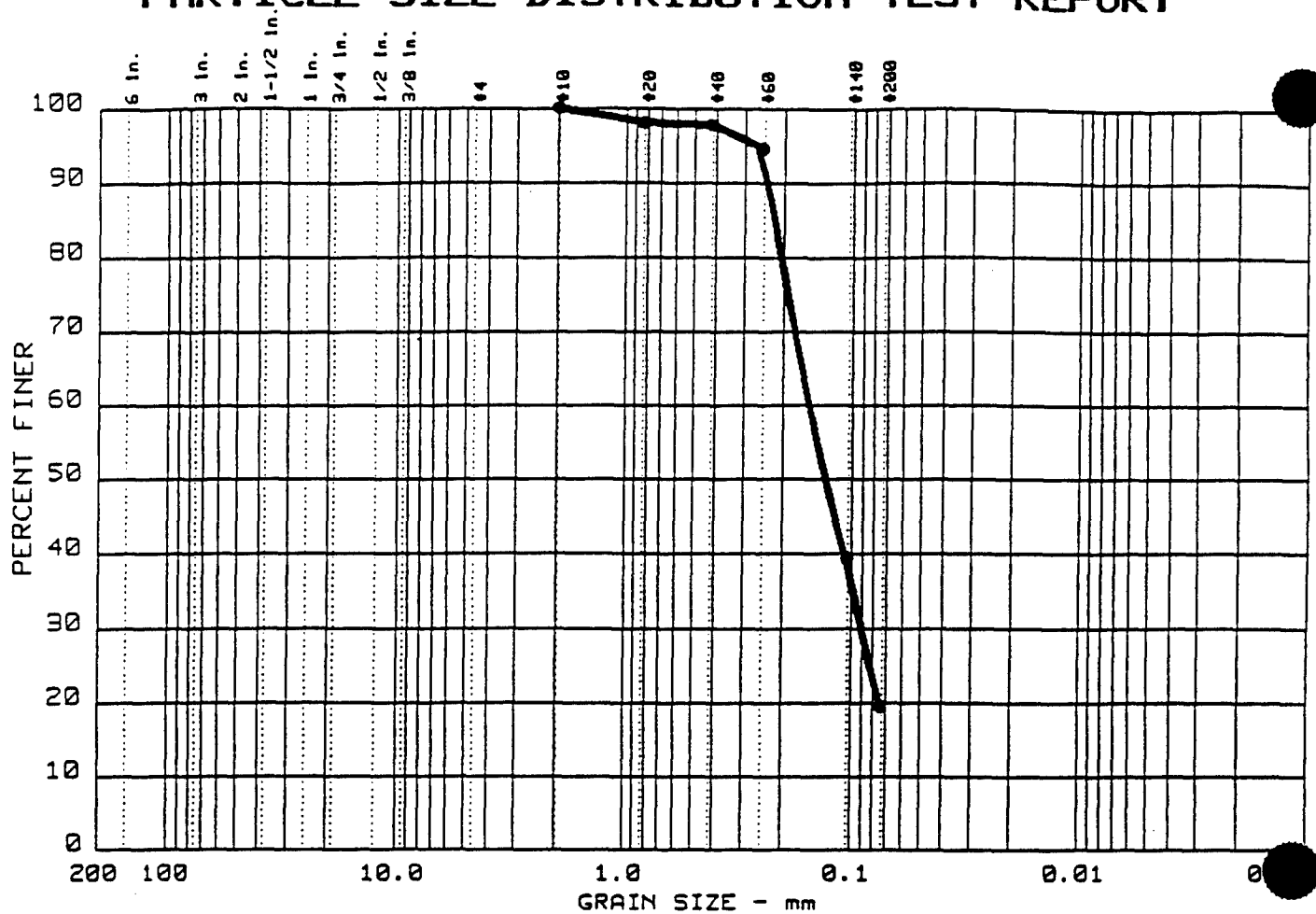
Sample information:

- BXG6 1958
- Tan
- Clayey

Remarks:

Sieve analysis only

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	80.6	19.4		SM		

SIEVE inches size	PERCENT FINER		
●			
X GRAIN SIZE			
D ₆₀	0.15		
D ₃₀	0.09		
D ₁₀			
X COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
●			
10	100.0		
20	98.0		
40	97.7		
60	94.5		
140	39.4		
200	19.4		

Sample information:

● BXG6 1950
Light Brown
Clayey

Remarks:

Sieve analysis only

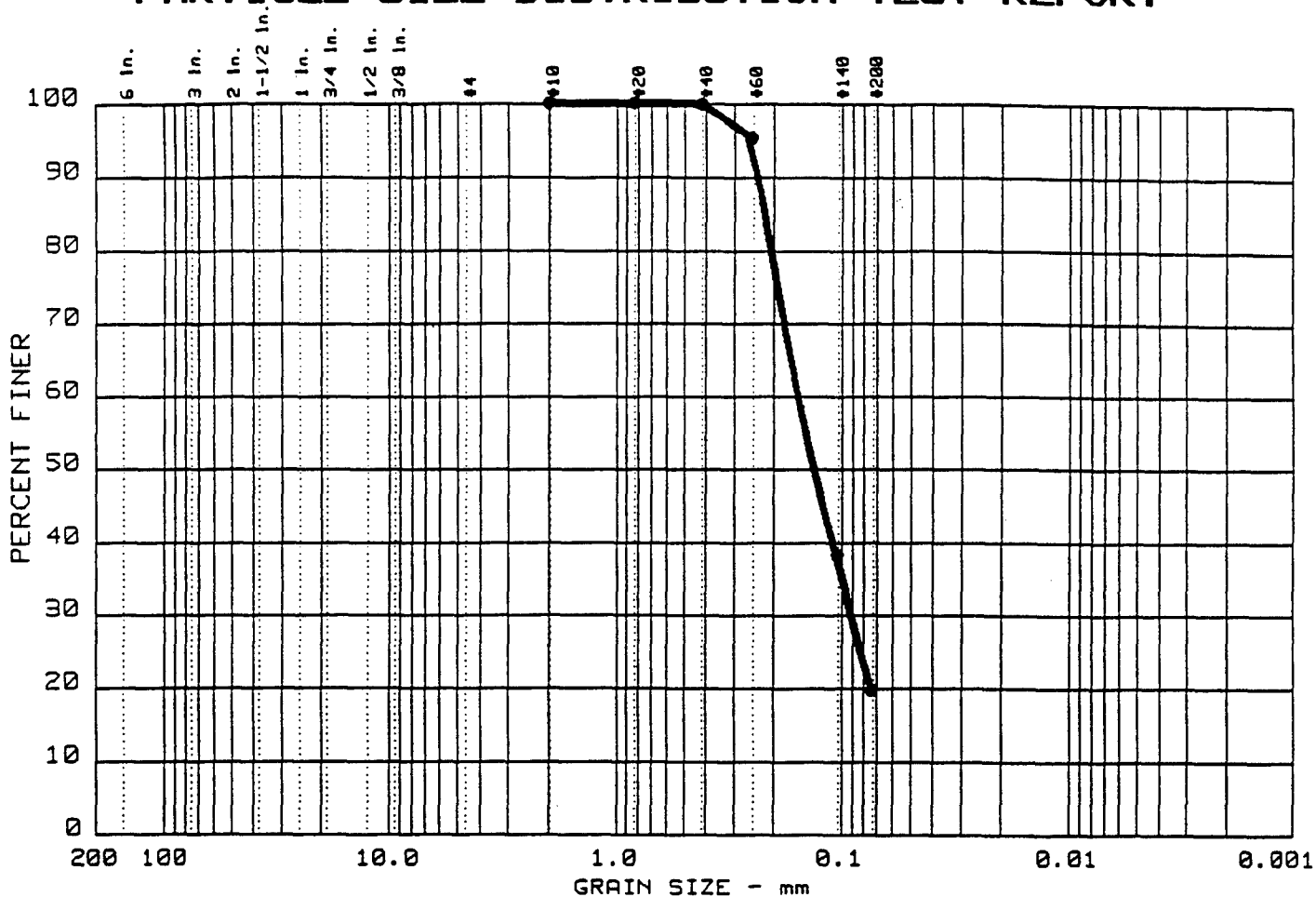
**ABB Environmental
Services, Inc.**

Project No.: 06917.13
Project: SA50 Phase III SI

Date: 3/28/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT

[illegible]

SIEVE inches size	PERCENT FINER		
	●		
X	GRAIN SIZE		
D ₆₀	0.16		
D ₃₀	0.09		
D ₁₀			
X	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
10	100.0		
20	100.0		
40	99.9		
60	95.4		
140	38.4		
200	19.7		

● BXG6 1948
Tan

Remarks:
Sieve analysis only

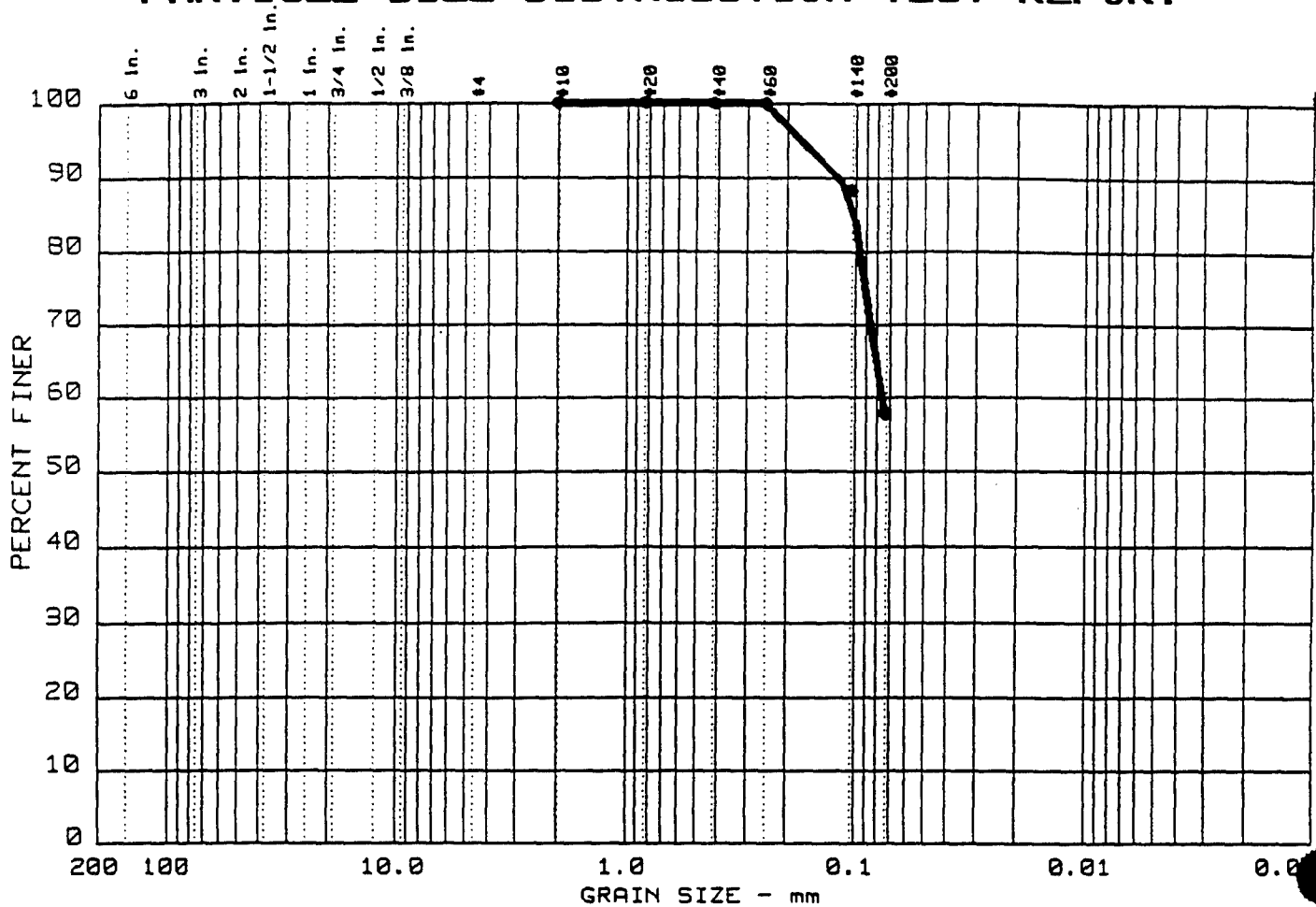
**ABB Environmental
Services, Inc.**

Project No.: 06917.13
Project: SA50 Phase III SI

Date: 3/28/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	42.2	57.8		ML		

SIEVE inches size	PERCENT FINER		
	•		
GRAIN SIZE			
D ₆₀	0.08		
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	•		
10	100.0		
20	100.0		
40	100.0		
60	99.9		
140	88.2		
200	57.8		

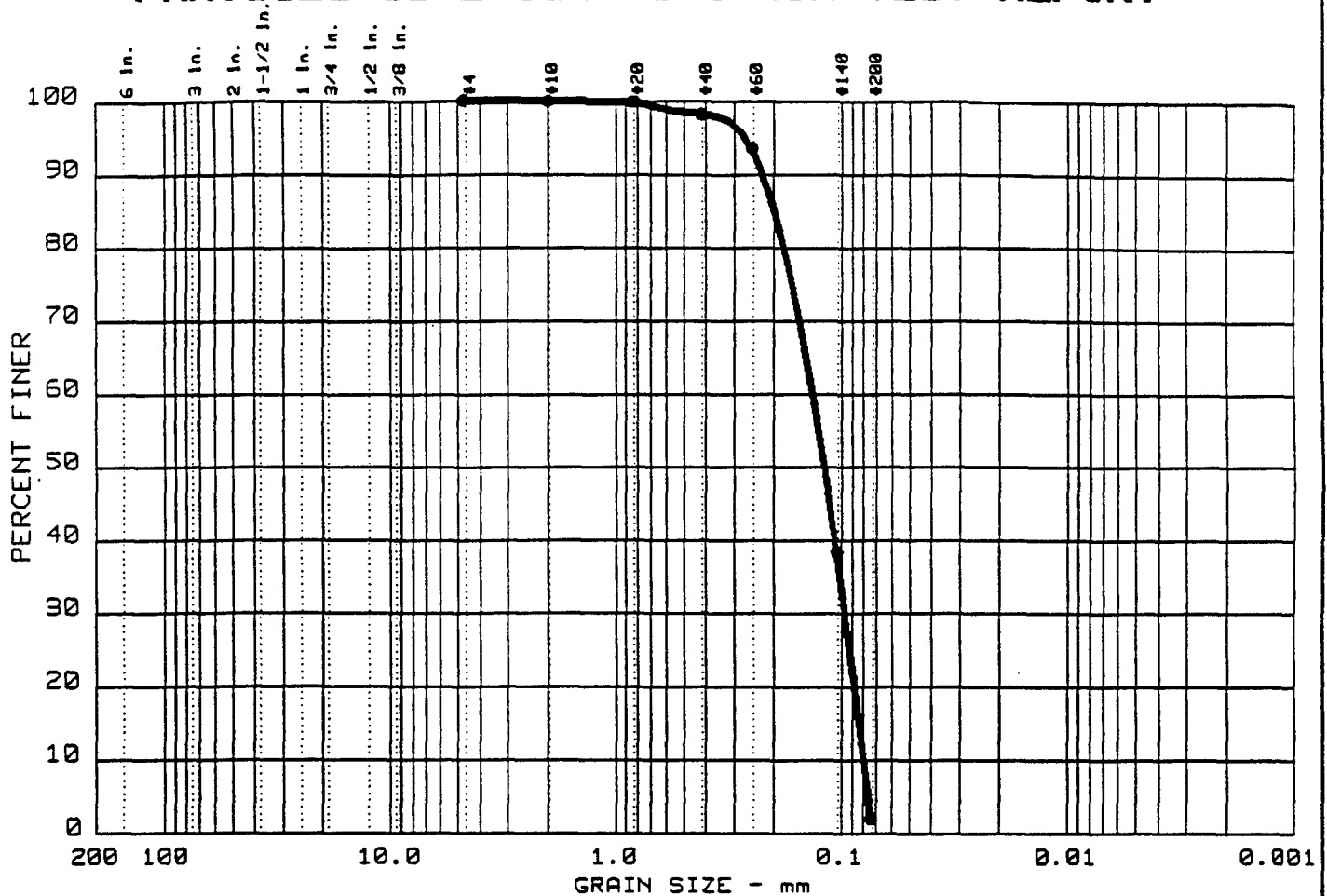
Sample information:

• BXG6 1924
Tan
Clayey

Remarks:

Sieve analysis only

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	97.9	2.1		SP		

SIEVE inches size	PERCENT FINER		
	●		
<div>✕</div> GRAIN SIZE			
D ₆₀	0.13		
D ₃₀	0.10		
D ₁₀	0.08		
<div>✕</div> COEFFICIENTS			
C _c	0.87		
C _u	1.7		

SIEVE number size	PERCENT FINER		
	●		
4	100.0		
10	100.0		
20	99.8		
40	98.1		
60	93.5		
140	38.4		
200	2.1		

Sample information:

● BXG6 1840

Remarks:

Sieve analysis only

**ABB Environmental
Services, Inc.**

Project No.: 06917.13
 Project: SA50 Phase III SI
 Date: 3/28/95

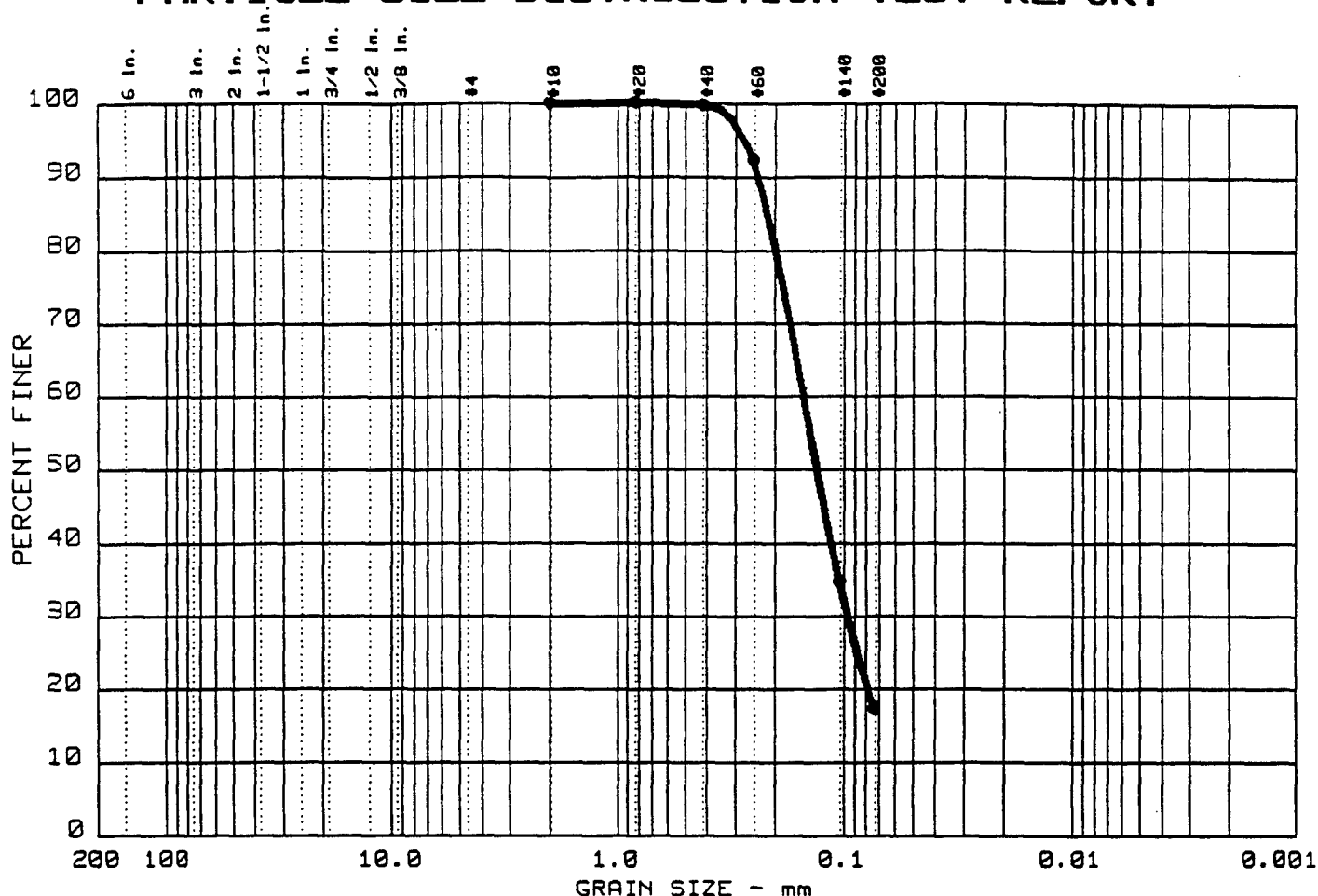
Data Sheet No. _____

Grain size distribution curve for a sample of sand. The graph plots Percent Finer (0 to 100) against Grain Size in mm (200 to 0.075). The curve shows a sharp drop between 0.425 mm and 0.075 mm, indicating a well-graded sand. The data points are:

Grain Size (mm)	Percent Finer (%)
200	100
100	100
60	100
40	100
20	100
10	100
4.75	100
2.5	100
1.18	100
0.85	100
0.425	100
0.25	92
0.15	33
0.075	18

Data Sheet No.

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	82.6	17.4		SM		

SIEVE inches size	PERCENT FINER		
	●		
GRAIN SIZE			
D ₆₀	0.15		
D ₃₀	0.10		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
10	100.0		
20	100.0		
40	99.7		
60	92.3		
140	34.9		
200	17.4		

Sample information:
 ● BXG6 1828
 Tan

Remarks:
 Sieve analysis only

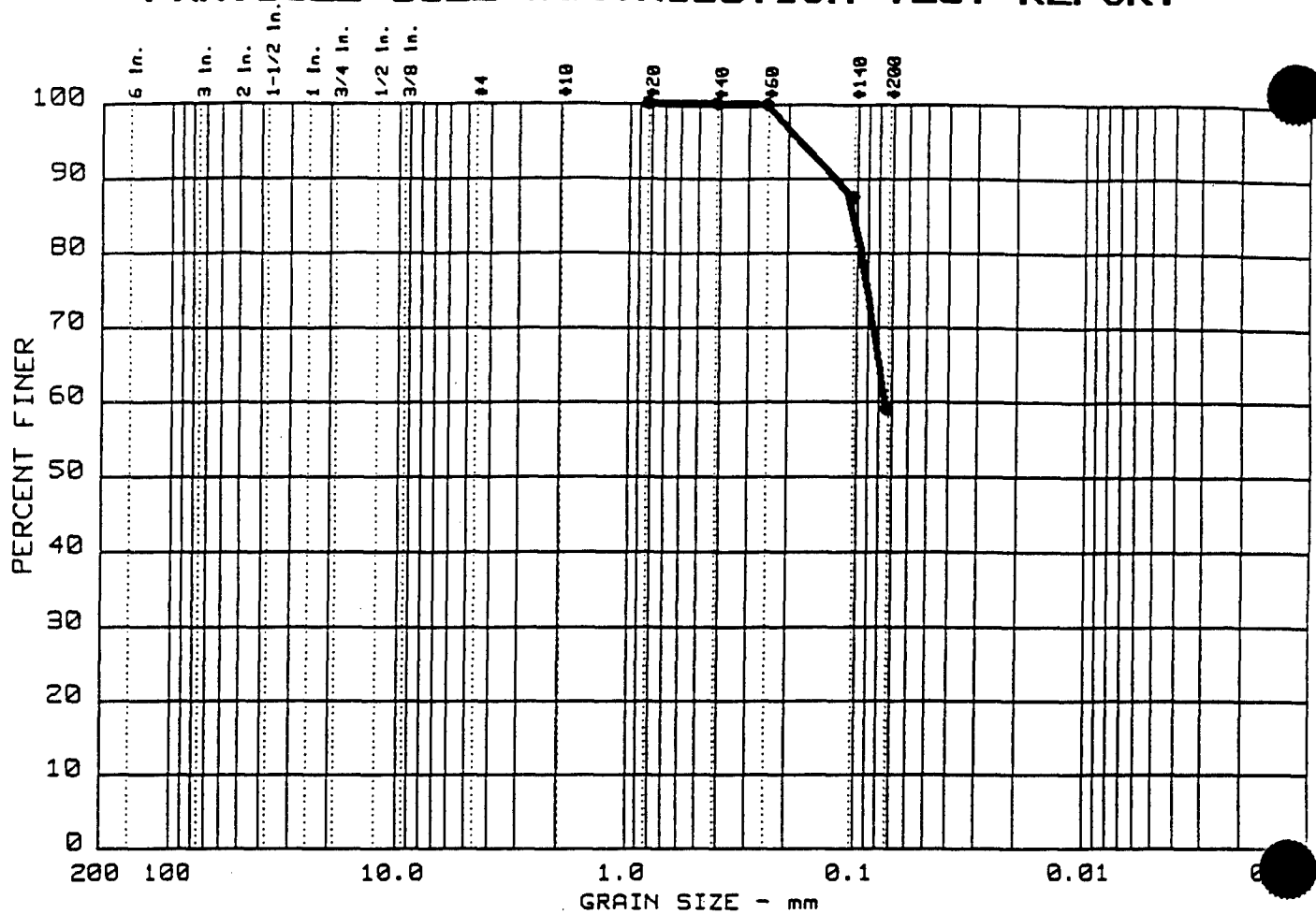
**ABB Environmental
Services, Inc.**

Project No.: 06917.13
 Project: SA50 Phase III SI

Date: 3/27/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	41.0	59.0		ML		

SIEVE inches size	PERCENT FINER		
	•		
GRAIN SIZE			
D ₆₀	0.07		
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	•		
20	100.0		
40	100.0		
60	99.9		
140	87.5		
200	59.0		

Sample information:

• BXG6 1822
Tan
Clayey

Remarks:
Sieve Analysis Only

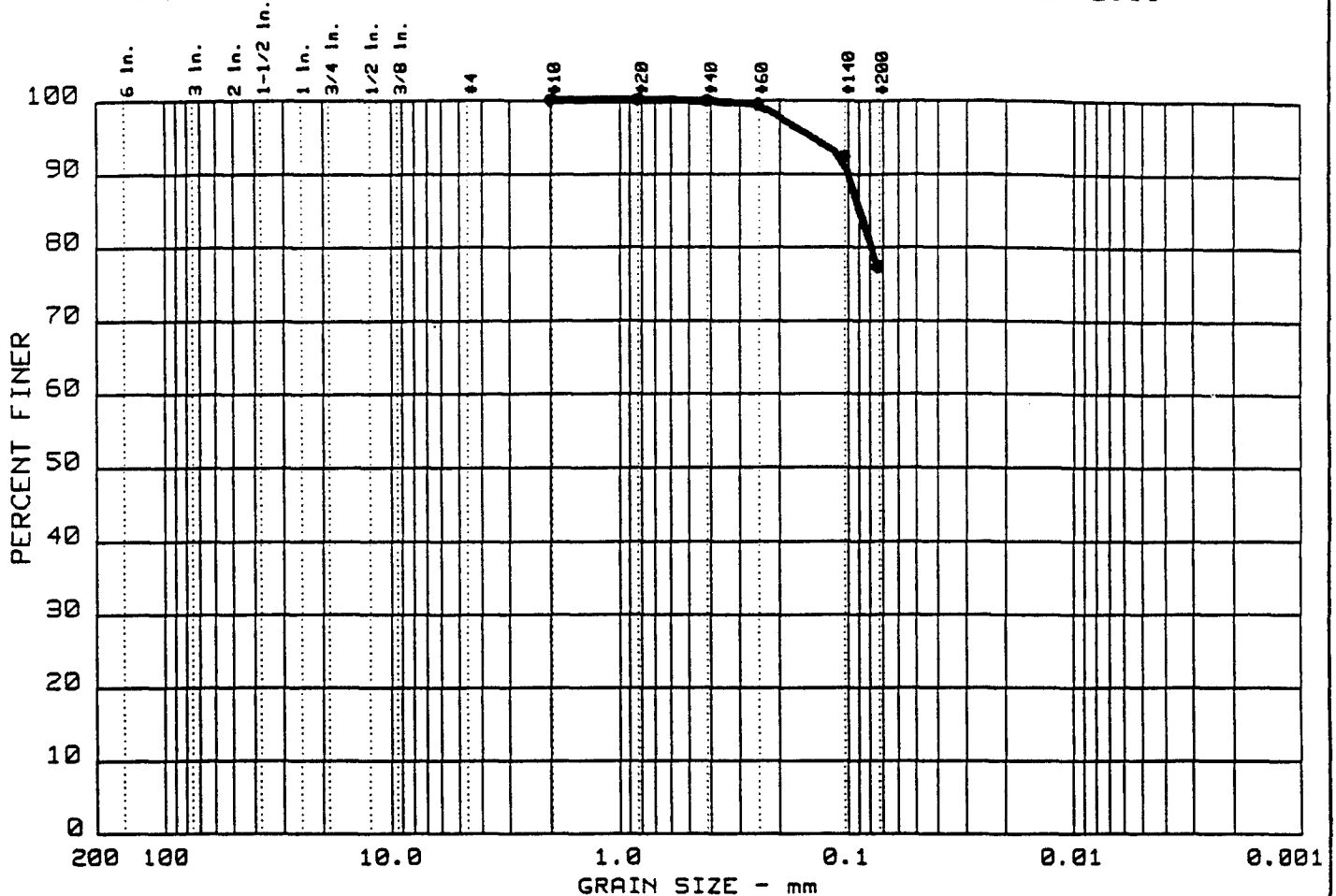
ABB Environmental Services, Inc.

Project No.: 06917.13
Project: SA50 Phase III SI

Date: 3/27/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	22.7	77.3		ML		

SIEVE inches size	PERCENT FINER		
	●		
GRAIN SIZE			
D ₆₀			
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
10	100.0		
20	100.0		
40	99.8		
60	99.4		
140	92.3		
200	77.3		

Sample information:

● BXG6 1734
Light Brown
Clayey

Remarks:

Sieve analysis only

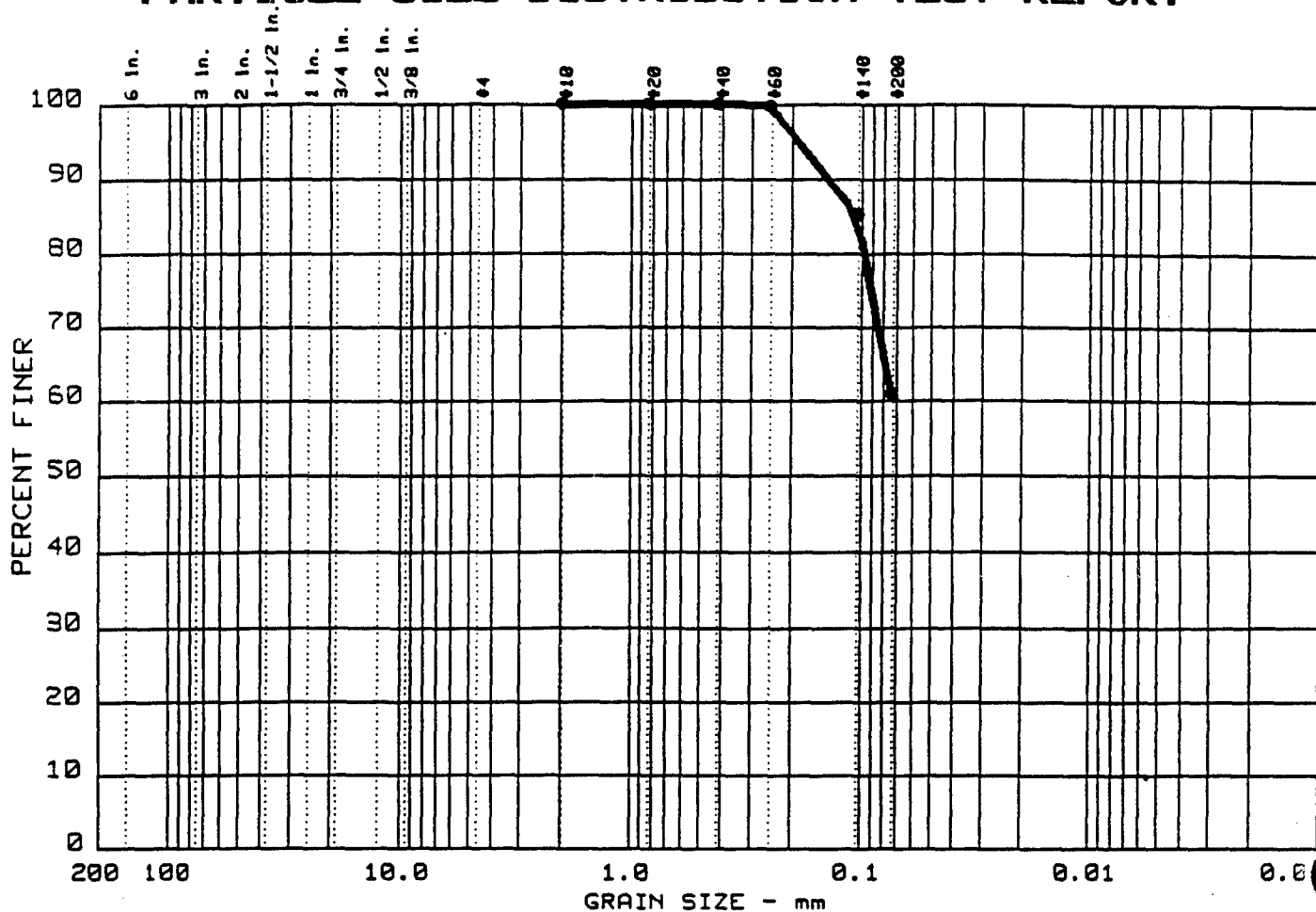
**ABB Environmental
Services, Inc.**

Project No.: 06917.13
Project: SA50 Phase III SI

Date: 3/28/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	39.0	61.0		ML		

SIEVE inches size	PERCENT FINER		
	•		
GRAIN SIZE			
D ₆₀			
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	•		
10	100.0		
20	100.0		
40	100.0		
60	99.7		
140	85.2		
200	61.0		

Sample information:

• BXG6 1640
Tan
Clayey

Remarks:

Sieve Analysis Only

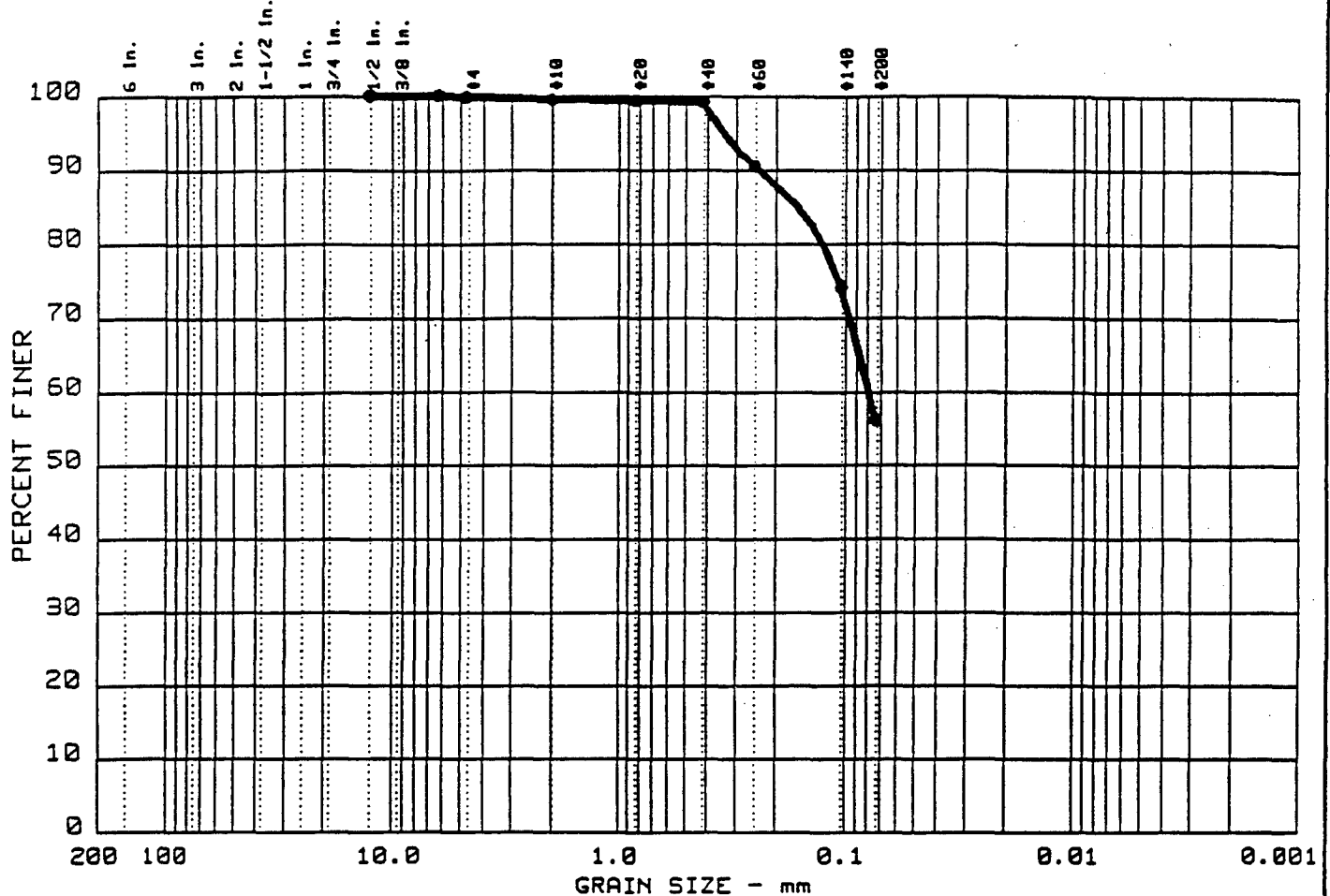
**ABB Environmental
Services, Inc.**

Project No.: 06917.13
Project: SA50 Phase III SI

Date: 3/27/95

Data Sheet No. _____

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.2	43.6	56.2		ML		

SIEVE inches size	PERCENT FINER		
0.5	100.0		
0.25	100.0		
<div>GRAIN SIZE</div>			
D ₆₀	0.08		
D ₃₀			
D ₁₀			
<div>COEFFICIENTS</div>			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
4	99.8		
10	99.5		
20	99.3		
40	99.1		
60	90.5		
140	74.1		
200	56.2		

Sample information:

● BXG6 1535

Tan

Clayey

Remarks:

Sieve Analysis Only

ABB Environmental Services, Inc.

Project No.: 06917.13
 Project: SASO Phase III SI
 Date: 3/27/95

Data Sheet No. _____

APPENDIX K
LEVEL 3 ANALYTICAL DATA

**LEVEL 3 ANALYTICAL DATA (IRDMIS)
SITE INVESTIGATIONS
GROUPS 3, 5, & 6 STUDY AREAS
FORT DEVENS, MASSACHUSETTS**

The attached diskette contains chemical data downloaded from the USAEC IRDMIS database in January 1996. The data were taken from the "CHEM" and "CHEM2" database tables and were compressed using LHA compression shareware (Version 2.11) as self-extracting files. This diskette contains two compressed files:

- 356DATA.EXE - data from all regular (non-QC) samples
- 356CQC.EXE - all QC data for rinsate blanks, trip blanks, and MS/MSD samples, as well as surrogates

Instructions for access:

- 1) Copy both files onto a hard drive. Approximately 22 megabytes of free disk space are required.
- 2) Type the name of the file to be decompressed (e.g., "356DATA").
- 3) Import the resulting dBase IV files (*.dbf) into any database program to access/process the data.

In order to understand the meaning of many of the fields present in the database files, it will be necessary to have access to the USAEC "IRDMIS Data Dictionary." Contact Potomac Research, Inc. at Aberdeen Proving Ground, MD at 1-410-679-7885 to request the latest version.

APPENDIX L
GEOPHYSICS REPORT

MEMORANDUM

Date: June 17, 1992
From: Rick Allen
To: Ben Rice
Subject: Geophysical Surveys
Fort Devens, Massachusetts
Contract No. DAAA15-91-D-0008, Task Order No. 2
Base Landfill / Moore Army Airfield

INTRODUCTION

The purpose of this technical memorandum is to describe the geophysical surveys which took place at the Fort Devens North Post Landfill (Landfill No. 5) and Moore Army Airfield. The North Post Landfill, designated SA (Study Area) 9 and is part of the Group 5 Study Areas. The Moore Army Airfield fueling system has been designated SA 50 and is part of the Group 6 Study Areas. The purpose for these investigations was to

- o delineate the actual limits of the landfill and provide insight into the nature and distribution of the landfilled materials;
- o identify the location of two 25,000 gallon fuel tanks at the airfield and all piping associated with the World War II aircraft and truck-fueling systems; and
- o assist in the placement of test pits, surface soil sampling and groundwater monitoring wells at both locations.

Several geophysical techniques were employed during this field effort. These include magnetometry, terrain conductivity, ground penetrating radar, and metal detector. A Site Plan showing the general areas of these investigations is presented as Figure 1.

SCHEDULE

The geophysical survey took place between April 27 and May 21, 1992.

PERSONNEL

The following ABB-ES personnel participated in the geophysical survey:

- o R. Allen
- o S. Calkin
- o D. Lovejoy

SURVEY CONTROL

All survey work at the Landfill and Airfield was conducted along a survey grid except for screening surveys intended to assist in the placement of test pits, surface soil sampling and groundwater monitoring wells. Survey grid nodes (50- by 50-feet or 100- by 100-feet) were established with a compass and cloth measuring tape using landmarks as reference points. Field sketch maps showing the relationship of grid nodes to landmarks were made at each site.

FIELD TECHNIQUES

The geophysical techniques used during this investigation are described below.

Magnetometer Survey

Magnetometers are used routinely for locating repositories of buried (drummed) wastes. Locating and quantifying these materials is essential to any remediation effort, and magnetometer surveys can provide an extra measure of safety to those personnel involved in the clean-up activities.

The earth's magnetic field is modified locally by both naturally occurring and manmade magnetic materials. The total field of the earth has a value which varies from approximately 30,000 to 60,000 gammas, depending on location: the total field value is approximately 30,000 gammas at the equator and 60,000 gammas at the poles. One can obtain the absolute value of the total earth's field intensity to an accuracy of 1 gamma or better. In the field, the operator should be aware of sources of high magnetic gradients such as would be caused by power lines, buildings, and any large iron or steel objects. If a total field survey is being conducted, base station readings should be taken frequently (every 30 minutes to 1 hour) to provide a check on any diurnal variations and magnetic storms that may occur during a survey. Typically, diurnal variations will not exceed a few tens of gammas.

Vertical gradient measurements involve the simultaneous acquisition by two sensors of two values of the total field. For this study, an EDA Omniplus Vertical Gradiometer was used. The sensors are mounted on a staff that is held vertically during a measurement. A known distance (in this case ½ meter) separates the sensors on the staff. The upper sensor is 8 feet

above the ground when a measurement is taken. This instrument records all data in an internal memory which can be transferred in the field to a PC for evaluation and data processing. The vertical gradient value is derived by obtaining the difference between the total field values of the lower and upper sensors divided by the distance between them.

Vertical gradient measurements are more sensitive to the presence of near-surface metal objects than total field values alone and are not subject to diurnal magnetic variations because any variation affects the two sensors on the magnetometer sensor staff equally.

Terrain Conductivity Measurements

Terrain conductivity surveys are used in mineral exploration for tracing conductive ore bodies (e.g., massive sulfides). They are also used for tracing conductive contaminant plumes in groundwater, since leachate from municipal landfills tends to be much more conductive than naturally occurring groundwater. Accordingly, the shape and extent of a plume can be studied with terrain conductivity surveys.

Data acquisition is more rapid than in conventional, galvanic, earth resistivity surveys. However, interpretation of conductivity data to yield a layered-earth solution is less dependable than with conventional earth resistivity. Two instruments commonly used in terrain conductivity surveys are the EM-31 and EM 34-3, both manufactured by Geonics, Ltd., in Mississauga, Ontario.

Field measurements may be recorded on a digital data logger, which is capable of recording simultaneously both the real and imaginary components (quadrature phase and in-phase components) of a measurement. The quadrature-phase component gives the ground conductivity value in millimhos per meter. The in-phase component, used also for calibration, is significantly more sensitive to metallic objects and hence is useful for looking for buried tanks and drums, among other things. Data from the in-phase component may be thought of as being equivalent to a metal detector survey.

The apparent conductivity value is comprised of the sum of the contributions from each layer that is "sampled" by the transmitter-receiver array. The volume (and therefore the depth) of earth materials sampled increases with increasing separation between the transmitter and receiver. The separation is fixed with the EM-31 (3 meters) but is operator-selectable with the EM 34-3 at 10, 20, or 40 meters.

Ground Penetrating Radar Survey

The GPR technique uses high frequency radio waves to determine the presence of subsurface objects and structures. Energy is radiated downward into the subsurface from an antenna that is pulled slowly across the ground at speeds varying from about 0.25 to 5 mph, depending on the amount of detail desired and the nature of the target. The radio wave energy is reflected from surfaces where there is a contrast in the electrical properties of subsurface materials. These surfaces may be naturally occurring geologic horizons (e.g.,

soil layers, changes in moisture content, voids and fractures in bedrock) or manmade (e.g., buried utilities, tanks, drums).

The reflected energy is processed and displayed as a continuous strip chart recording of distance versus time (where time can be thought of as proportional to depth). The depth of penetration of a GPR system is highly site-specific, and depends on the soil types at the site (clean sands are best), moisture conditions (dry is best), and the frequency of the antenna (the lower the frequency, the deeper the penetration, and the less the resolution capability).

Typical applications for GPR include delineating the boundaries of buried hazardous waste materials and the perimeters of abandoned landfills; finding steel reinforcement bars and voids in concrete structures; and locating and mapping underground storage tanks and other buried utilities.

Metal Detector Survey

Metal detection techniques are often used in hazardous waste and related studies to map the edges of trenches where hazardous materials may have been disposed in drums or other metallic containers, to trace underground utilities, to locate buried tanks, and to quickly screen large sites where metallic deposits are known or suspected. Once a general site screening has been performed, investigators are in a better position to formulate a strategy for additional exploration techniques, as appropriate.

A metal detector responds to the electrical conductivity of metal targets. The conductivity of such targets usually contrasts sharply with that of the medium surrounding them (air or soil). Although there are many different types and configurations of metal detectors, all of them consist of a transmitter and receiver. The transmitter creates an alternating (primary) magnetic field about the transmitter coil which is balanced, or nulled, in the receiver coil to cancel the effect of the primary field in the transmitter. When the transmitter is in the vicinity of a metal object, eddy currents are induced to flow in that object by the primary field generated by the transmitter. These eddy currents produce a secondary magnetic field which interacts with the primary field upsetting the existing balance (null) condition resulting in an output, normally to a meter or audio signal, or both.

RESULTS

The results of the geophysical surveys at the Fort Devens North Post Landfill (Landfill No. 5, Group 5 Study Areas, SA 9) and Moore Army Airfield (Group 6 Study Areas, SA 50) are discussed below.

North Post Landfill - SA 9

Geophysical surveys at the North Post Landfill began on May 4 and were completed on May 6, 1992 (Figure 2). The surveys consisted of simultaneous magnetic and terrain conductivity measurements on a 20- by 20-foot grid which covered approximately 16 acres. A total of 1810 measurement stations were established.

An EDA OmniPlus Gradiometer (a proton precession total field magnetometer with gradiometer option) and a Geonics EM31 DL¹ terrain conductivity meter comprised the instrumentation used.

The results of the survey are presented as a field sketch maps, Figures 3A and 3B, and contour maps, Figures 4, 5, 6, and 7. Figures 4 and 5 are the vertical gradient contours and total magnetic field contours from the magnetic survey. Figures 6 and 7 are the quadrature (conductance) and inphase contours from the terrain conductivity survey.

The interpreted limits of disposal at the landfill have been superimposed over the four contour maps for comparison. The area of the landfill thus defined is approximately 6.2 acres.

Moore Army Airfield - SA 50

Geophysical surveys at the Moore Army Airfield, SA 50, began on April 27 and were completed on May 20, 1992. The surveys consisted of magnetic and ground penetrating radar surveys to identify the location of two 25,000 gallon fuel tanks and all piping associated with the World War II aircraft and truck-fueling systems. The surveys were also intended to assist in the placement of test pits, surface soil sampling and groundwater monitoring wells at selected locations.

A 50- by 50-foot measurement grid was established in the approximate vicinity where old engineering drawings indicated the location of the two 25,000 gallon fuel tanks (Figure 8). Magnetic vertical gradient measurements were made on a 10- by 10-foot grid within the 270- by 300-foot survey area (Figure 9). The magnetic vertical gradient contours are presented as Figure 10.

ABB-ES concludes that the two tanks have been removed, although the magnetic anomaly centered at (X=200, Y=210) may reflect metal debris and piping left in place following tank removal.

¹a Polycorder digital Data Logger recorded both quadrature and inphase components of the induced magnetic field. The quadrature phase is linearly related to the conductivity, whereas the inphase component is more sensitive to the detection of buried metal objects.

Based on magnetic information, a GPR survey was concentrated in an area defined by (X=130 to X=250, Y=200 to Y=280). Several of the GPR recordings made in this area (the locations for all traverses made are shown on Figure 9) indicate the presence of a possible excavation (a data sample is given as Figure 11 [Line 21]).

With the GPR data, ABB-ES verified the accuracy of the engineering drawings and mapped the indicated piping in several locations. The ground trace of existing piping was mapped in the field at the time of the survey. Piping was also mapped between the aircraft fueling pit boxes located along the northern edge of the grassy strip north of the east-west runway.

In addition to the work described above, approximately 27 prospective drilling locations were screened at various locations around the airfield for Sites SA 30, SA 31, SA 47 (also located on and around the airfield), and SA 50. The screening was accomplished by completing 2 or more GPR traverses over the exploration to determine if subsurface obstacles were present. ABB-ES uses GPR screening routinely as a supplement to as-built utility drawings and has found it invaluable for preventing damage to utilities and injury to personnel.

TABLE 1.
DAILY LOG OF FIELD ACTIVITIES

<u>DATE</u>	<u>ACTIVITY</u>
Monday 04-27-92	Mobilize crew (2) from Portland, ME to Ft. Devens, MA; proceed to Moore Army Airfield , brief site walk. Objective: locate 2 25,000 gallon UST's under field, associated fill lines. Lay out magnetic grid, start magnetic survey a.m. GPR survey p.m. at east end of SA 50 near top of slope 150 to 200 feet west of tank car unloading station; GPR profiling also at south end of site near aircraft fueling pit boxes; also GPR in central portion of mag grid - appears to be an excavation near where tanks were supposed to have been. Lay out additional magnetic grid 100 ft north and west of a.m. magnetic survey.
Tuesday 04-28-92	<p>Additional magnetic survey at Moore Army Airfield. Complete grid laid out day before.</p> <p>Proceed to Site 43Q, soccer field. Use metal detector for quick reconnaissance screening; located several MD anomalies, ran GPR over them. Set up magnetic grid over much of site. Started magnetic survey p.m. Initial results - no UST's.</p> <p>Proceed to Site 43R (adjacent to and northeast of Site 43Q). Lay out magnetic grid and complete magnetic survey. Appears to be possible old building foundation/UST near SE corner of field.</p> <p>Proceed to Site 43B, two GPR traverses over old concrete foundation - appears to be an excavation, no UST.</p> <p>Site walk to Site 43C, fuel dispensing unit.</p>
Wednesday 04-29-92	<p>Arrive Site 43R. Lay out GPR grid in SE corner of grid where large magnetic anomaly mapped after data contoured. Appears to be a UST 15 to 18 feet long (marked and flagged).</p> <p>Proceed to Site 43Q, soccer field. Extended magnetic grid 150 ft west of previous coverage. Finish magnetic survey.</p> <p>Proceed to Site 43C. Located and mapped one tank between island and Building 3541.</p> <p>Proceed to Site 43B, lay out magnetic grid, finish magnetic survey, run GPR survey over magnetic anomaly - does not appear to be any UST here.</p> <p>Proceed to Site 43N. Locate tank with metal detector and map with GPR. Plan to do limited magnetic survey tomorrow.</p>

Thursday
04-30-92 Arrive **Site 43N**. Lay out magnetic grid, finish magnetic survey, complete several GPR traverses to preclude possibility of additional tank.

Proceed to **Site 43Q, soccer field**. Completed several GPR traverses with moderately high magnetic anomalies. No UST's identified.

Proceed to **Site 43H, motor pool**. Completed GPR survey (5-foot grid both directions. Located one target parallel to Building 602 - does not appear to be UST.

Proceed to **Site 43I** near Building 603. Completed GPR survey, 3 foot grid, both directions, did not identify UST.

Proceed to **Site 43G** near Building T-2009. Completed GPR survey, 3 foot grid, both directions, did not identify UST.

Proceed to **Site 43S**, near signal training area, lay out magnetic grid (will complete magnetic survey tomorrow).

Friday
05-01-92 Complete magnetic survey at **Site 43S**.

Proceed to **Site 43D**. Mapped 2 UST's (under cyclone fence near dumpster).

Proceed to **Site 43K**. Mapped 1 UST adjacent to Building 2514.

Monday
05-04-92 Arrive at **Base Landfill**, lay out survey grid, start magnetic/EM31 survey (20 by 20-foot grid).

Tuesday
05-05-92 Continue magnetic/EM31 survey at **Base Landfill**.

Wednesday
05-06-92 Continue magnetic/EM31 survey at **Base Landfill**. Complete survey in p.m. Lay out baseline with wooden stakes and orange flagging.

Thursday
05-14-92 R. Allen arrived at **Base landfill** in a.m. Met D. Pierce, J. Snowden, B. Rice. R. Allen mapped perimeter of landfill (based on magnetic/TC data) with pin flags. Marked four potential test pit locations with triple pink flags at (X=1100,Y=1140), (X=1100,Y=1300), (X=1160,Y=1470), and (X=930,Y=1800).

Tuesday
05-19-92

R. Allen meet D. Pierce at Site 43J. Doug showed R. Allen Site 43J, Site 43A, Building T-1422 (for gate key to Site 43A).

GPR survey at Site 43J, possible UST in front of hazardous waste storage buildings; mapped UST.

Used Metal Detector at Sites 43C, 43R (near soccer field), 43N to test effectiveness of MD for screening for UST's where GPR previously mapped UST's - very effective.

Arrive Site 43A, start MD screening. Railroad ballast near tracks very "metallic", no penetration with GPR either. Screened entire site with MD (traverses 3 to 5 feet apart). Mapped four MD anomalies, used magnetometer to check each anomaly, used GPR to check two anomalies where high mag gradients. No apparent UST's based on GPR, but penetration limited; will do magnetic grid on one anomaly tomorrow.

Wednesday
05-20-92

Arrived at Site 43E (bank parking lot) early a.m. Screened parking lot with MD, located an anomaly. Mapped UST in this location with GPR, marked axis of UST (near Building 2020).

Returned to Site 43A. Lay out mag grid, complete 10-foot grid over 50 by 100 area along Cook Street. Completed several GPR traverses with 120 MHz antenna. No apparent UST.

Arrived Building 3713. D. Pierce pointed out locations for borings -01X, -06X, -05X, -02X, -03X, -04X, and -07X. Will complete later.

Arrived Moore Army Airfield to map a number of borings for Sites SA 30, SA 31, SA 47 and SA 50. Screened approximately 27 locations.

Thursday
05-21-92

Arrive Building 3713. Meet with Vin Rivard to obtain gate key to access maintenance yard. Cleared location for -04X. Then cleared -01X, -06X, -05X, -03X, -07X, and -02X. Departed Ft. Devens at 1040.

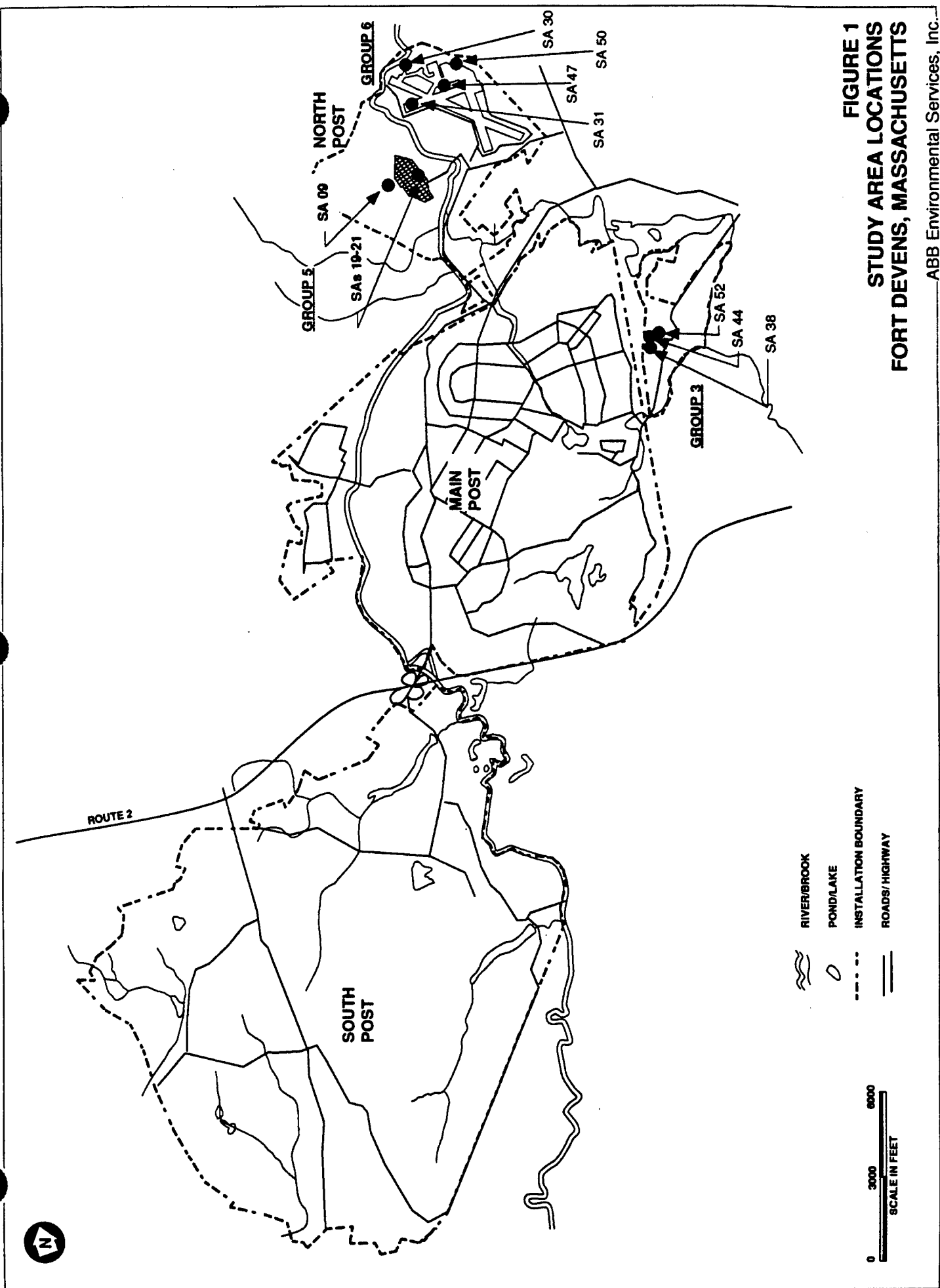


ABB Environmental Services, Inc.



WWTMW-06

WWTMW-05

POND

WWTMW-04

WWTMW-11

WWTMW-03

WWTMW-02A

G5M-92-01X

WWTMW-07

O9E-92-03X

WWTMW-02

WWTMW-10

WWTMW-12

**GEOPHYSICAL
SURVEY
GRID**

G5M-92-02X

G5M-92-03A

G5M-92-03B

WWTMW-01A

WWTMW-09

WWTMW-14
(1400ft east)

O9E-92-01X

WWTMW-08

WWTMW-13

O9E-92-04X

WWTMW-01

Walker Brook

Nonacopsis
Brook

LEGEND



MONITORING WELL LOCATION



TEST PIT LOCATION

SCALE IN FEET



**FIGURE 2
GEOPHYSICAL SURVEY GRID AND
EXPLORATION LOCATIONS
GROUP 5 STUDY AREAS
FORT DEVENS, MA**

ABB Environmental Services, Inc.

PROJECT

FT DEVENS
LANDFILL

COMP. BY

JOB NO.

CHK. BY

DATE

5/5/92 - SJA

☒ = Staked, Marked
w/XY Coordinates

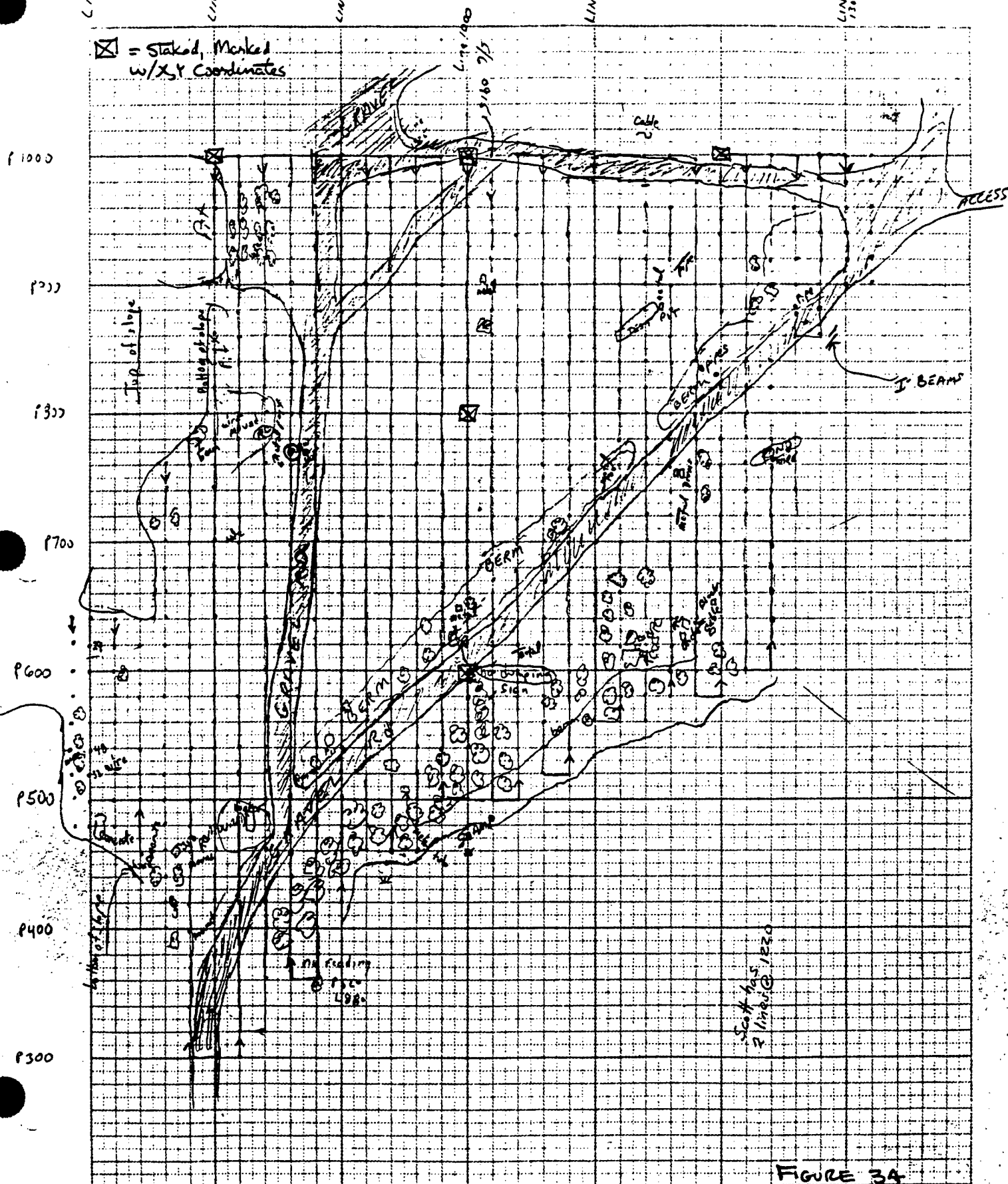


FIGURE 34

VERTICAL GRADIENT CONTOURS - BASE LANDFILL

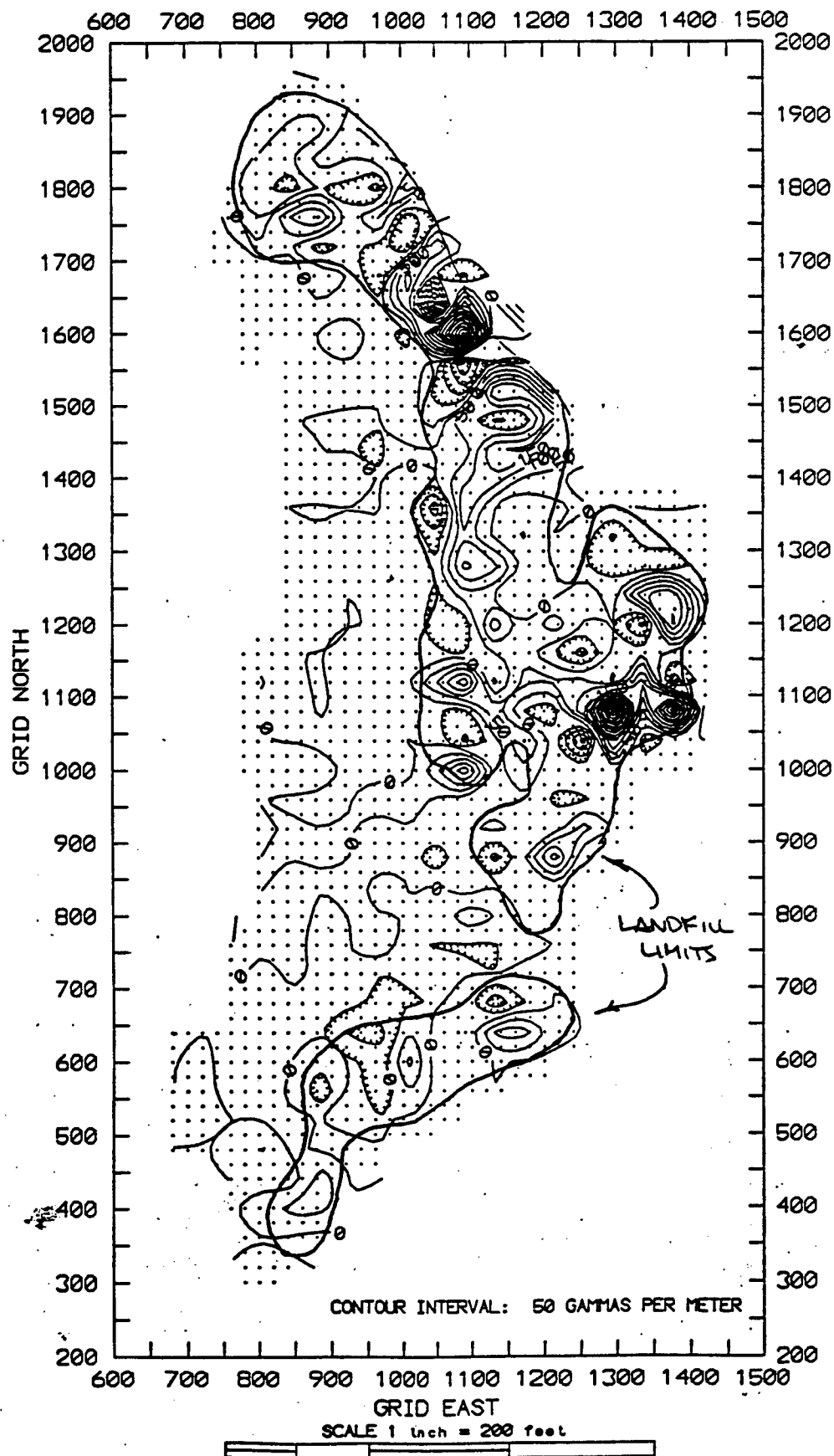


FIGURE 4

TOTAL (MAGNETIC) FIELD CONTOURS - BASE LANDFILL

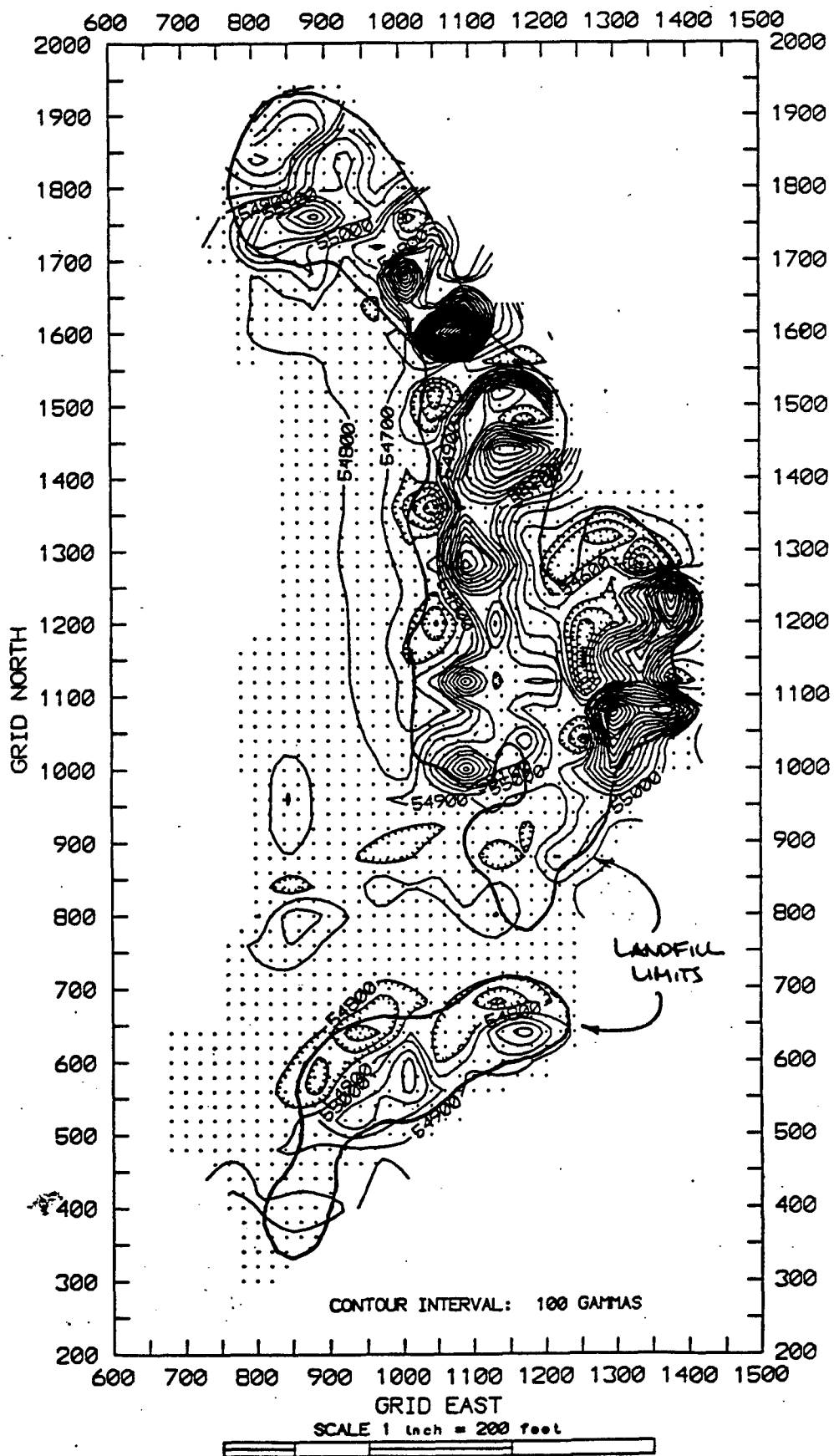


FIGURE 5

QUADRATURE PHASE CONTOURS - BASE LANDFILL

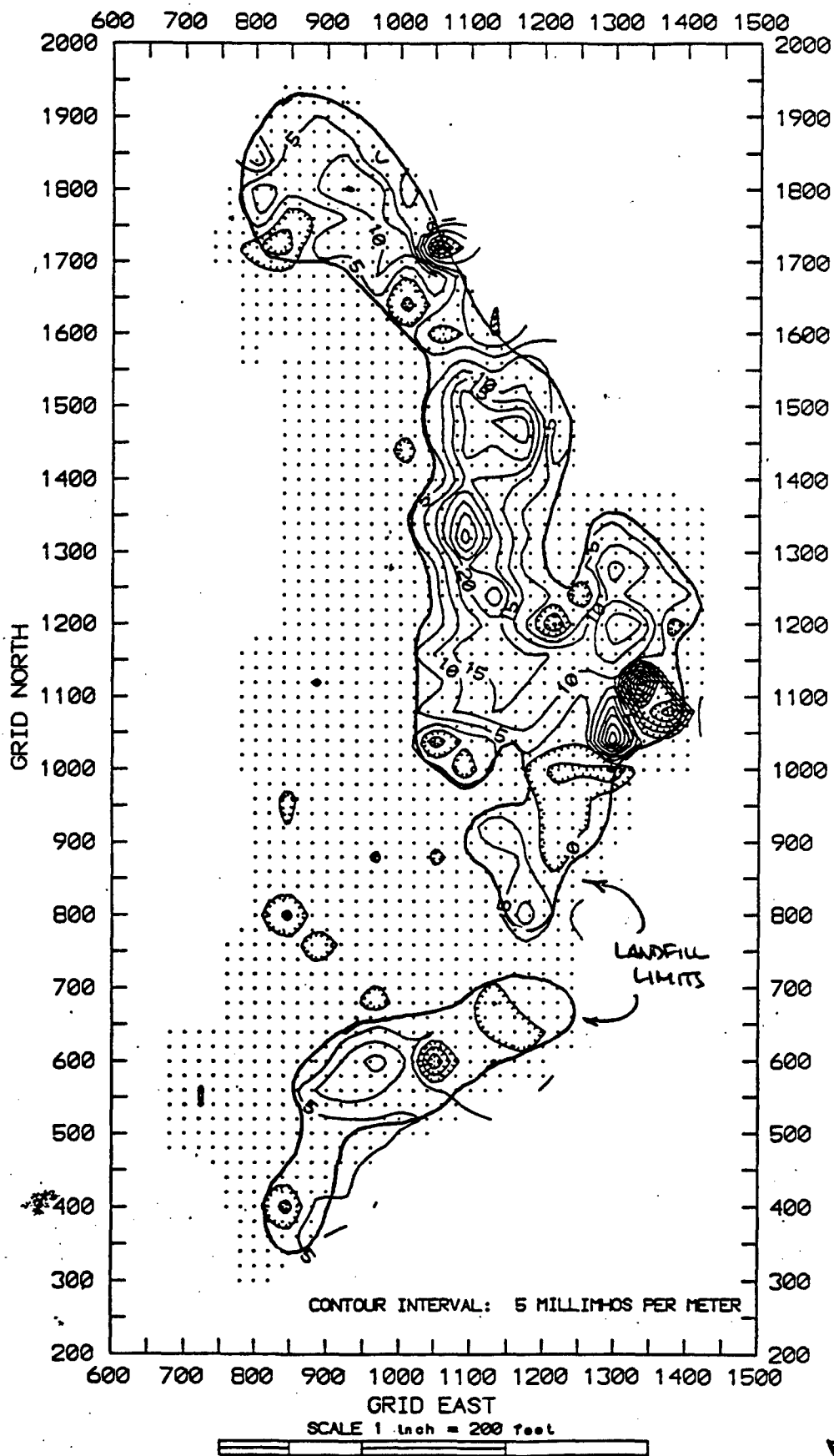


FIGURE 6

IN PHASE CONTOURS - BASE LANDFILL

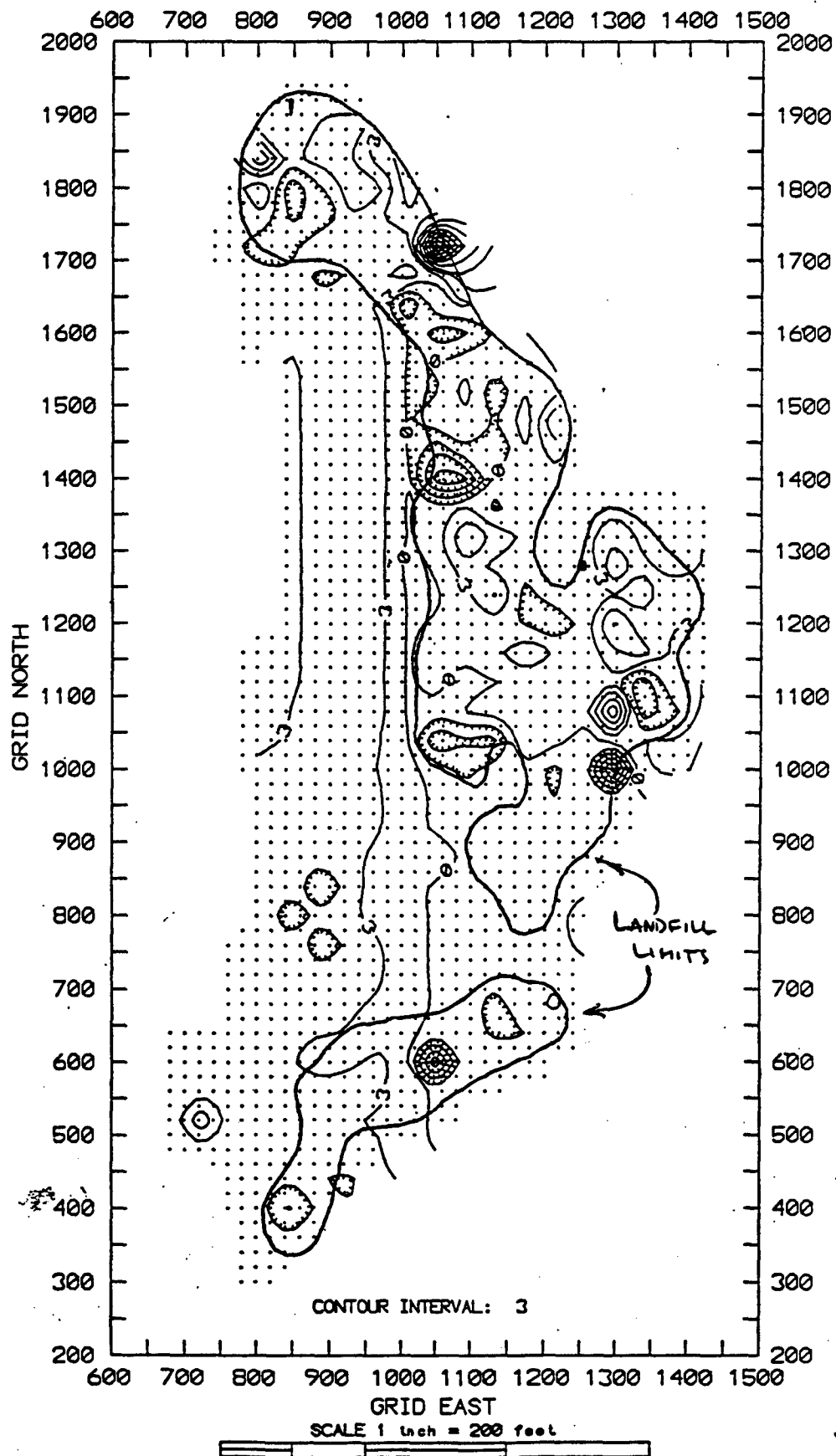


FIGURE 7

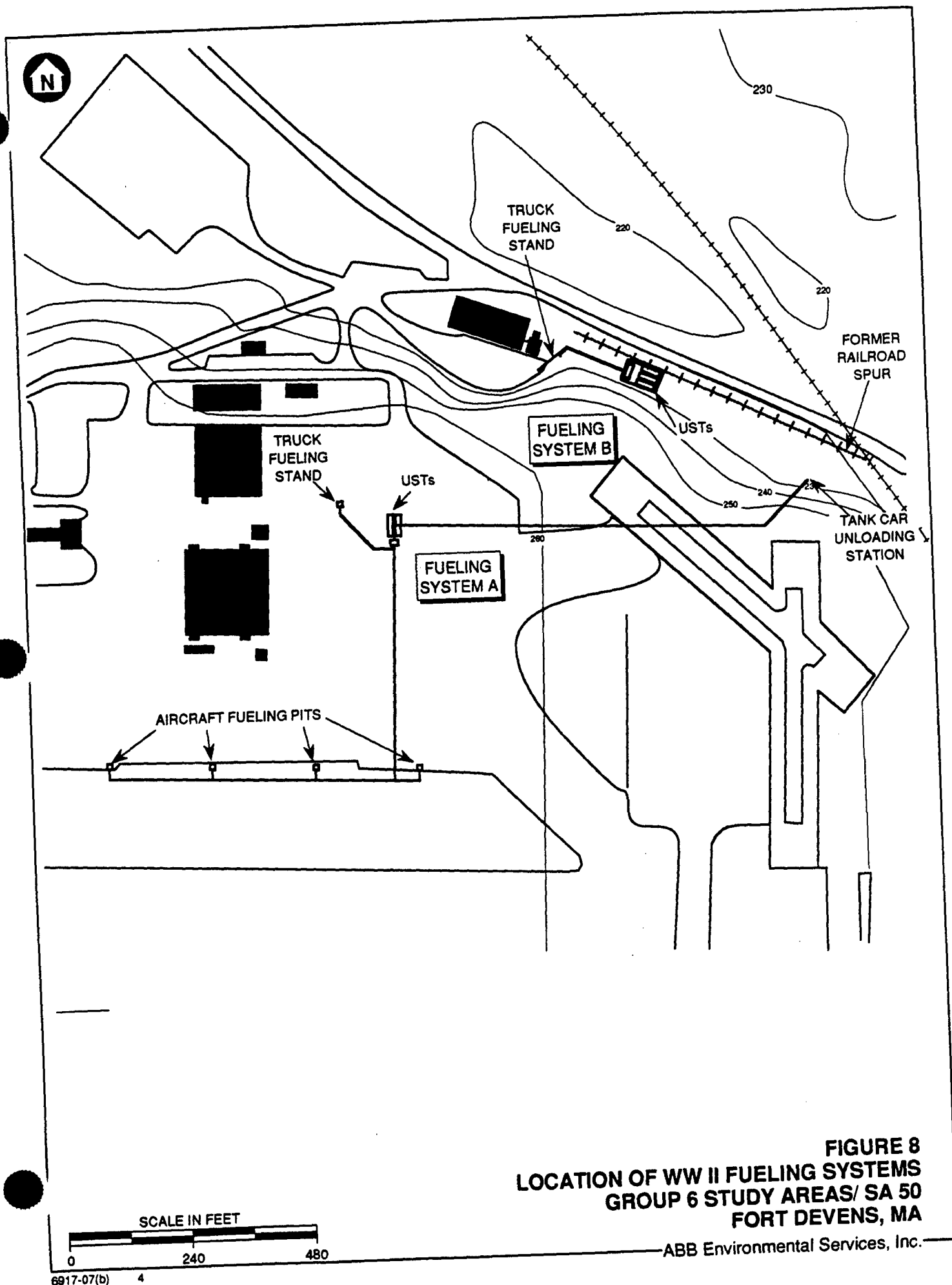


FIGURE 8
LOCATION OF WW II FUELING SYSTEMS
GROUP 6 STUDY AREAS/ SA 50
FORT DEVENS, MA

ABB Environmental Services, Inc.

VERTICAL GRADIENT CONTOURS
MOORE ARMY AIRFIELD
FORT DEVENS, MASSACHUSETTS

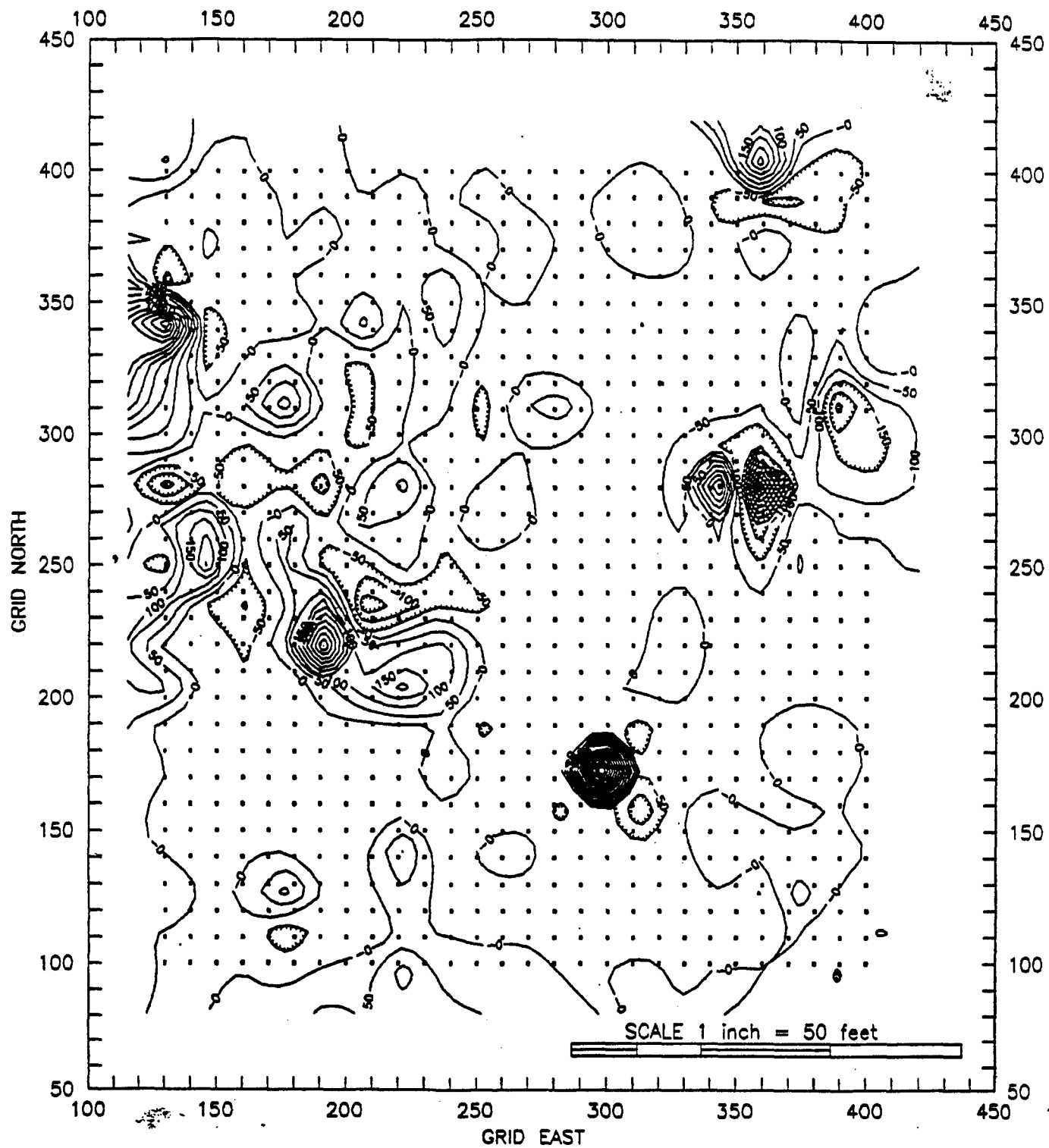


FIGURE 10

100
GROUND SURFACE

10 ft

↓

150

EXCAVATION?

PIPE?

APPENDIX M
COLIFORM BACTERIA RESULTS

REVET ENVIRONMENTAL & ANALYTICAL LABORATORIES, INC.

15 Belmont Street
Worcester, MA 01605
DEP Certification # MA082
(508) 753-3738

Page 1

Client: ABB ENVIRONMENTAL Contact: DOUG PIERCE
REVE Account No.: D1207 Location/PO: FORT DEVENS/P.N. 6917-05
Date Received: 04/07/92 Matrix: Water
Method: Total Coliform -303 Analysis Date: 04/07/92
Fecal Coliform -909

QC Dept: *David Cooper for*
Quality Control Office

Date: *4/14/92*

REVET ID	Client ID	Date Sampled	Total Coliform Results, org/100 ml	Fecal Coliform Results, org/100 ml
1227	D-1-1	04/07/92	0	0
1228	D-1-2	04/07/92	0	0

*SOURCE
WATER
SAMPLES*

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Page 1

Client: ABB Contact: D. Pierce
REVET Account No.: D1472 Location/PO: Fort Devens/06917-04
Date Received: 07/14/92 Matrix: Water
Method: Total Coliform -SM 9222 B
Fecal Coliform -SM 9222 D

QC Dept: [Signature]
Quality Control Office

Date: 7/15/92

REVET ID	Client ID	Total Coliform		Fecal Coliform	
		Date Sampled	Results org/100 ml	Results org/100 ml	
2894	GSM-92-02X	07/14/92	1	0	
2895	GSM-92-01X	07/14/92	20	0	
2896	WWTMW-08	07/14/92	0	0	

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Page 1

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Client:	ABB ENVIRONMENTAL	Contact:	DOUG PIERCE
REVE Account No.:	D1470	Location/PO:	FORT DEVENS/06917-04
Date Received:	07/13/92	Matrix:	Water
Method:	Total Coliform	-SM 9222 B	
	Fecal Coliform	-SM 9222 D	

QC Dept: *B. Tyla* *for* Date: *7/14/92*
Quality Control Office

REVE ID	Client ID	Date Sampled	Total Coliform	Fecal Coliform
			Results org/100 ml	Results org/100 ml
2891	MXG-503-X1	07/13/92	0	0

=====

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Worcester, MA 01605
DEP Certification # MA082
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Page 1

Client: ABB ENVIRONMENTAL Contact: DOUGLAS PIERCE
REVET Account No.: D1484 Location/PO: FORT DEVENS/P.N. 06917-05
Date Received: 07/16/92 Matrix: Water
Method: Total Coliform -SM 9222 B
Fecal Coliform -MS 9222 D

QC Dept: Paul Corbin for
Quality Control Office

Date: 7/2/92

REVET ID	Client ID	Total Coliform		Fecal Coliform	
		Date Sampled	Results org/100 ml	Results	Results org/100 ml
2956	WWTMW-2A	07/16/92	100	<10	
2957	WWTMW-3	07/16/92	<50	<10	
2958	WWTMW-4	07/16/92	<50	<10	

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Worcester, MA 01605
DEP Certification # MA082
(508) 753-3738

Page 1

Client: ABB ENVIRONMENTAL Contact: DOUGLAS PIERCE
REVET Account No.: D1489 Location/PO: FORT DEVENS/PN. 06917-04
Date Received: 07/17/92 Matrix: Water
Method: Total Coliform -SM 9222 B
Fecal Coliform -SM 9222 D

QC Dept: David Toupin for
Quality Control Office

Date: 7/20/92

REVET ID	Client ID	Date Sampled	Total Coliform	Fecal Coliform
			Results org/100 ml	Results org/100 ml
2969	WWTMW-06	07/17/92	<50	<10
2970	WWTMW-05	07/17/92	<50	<10

REJET ENVIRONMENTAL & ANALYTICAL LABORATORIES, INC.

15 Belmont Street

Worcester, MA 01605

DEP Certification # MA082

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Page 1

Client: ABB ENVIRONMENTAL

Contact: DOUGLAS PIERCE

REJET Account No.: D1502

Location/PO: FORT DEVENS/06917-04

Date Received: 07/22/92

Matrix: Water

Method: Total Coliform - SM 9222 B
Fecal Coliform - SM 9222 D

QC Dept: *[Signature]*
Quality Control Office

Date: 7/24/92

REJET ID	Client ID	Total Coliform		Fecal Coliform	
		Date Sampled	Results org/100 ml	Results org/100 ml	
3061	WWT-MW-02	07/22/92	7	0	
3062	WWT-MW-07	07/22/92	0	0	

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Worcester, MA 01605
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Page 1

Client: ABB ENVIRONMENTAL Contact: DOUGLAS PIERCE
REVE Account No.: D1474 Location/PO: FORT DEVENS/P.N. 06917-04
Date Received: 07/15/92 Matrix: Water
Method: Total Coliform -SM 9222 B
Fecal Coliform -SM 9222 D

QC Dept: David Camp for
Quality Control Office

Date: 7/20/92

REVET ID	Client ID	Total Coliform		Fecal Coliform	
		Date Sampled	Results org/100 ml	Results org/100 ml	
2899	MXM-W01-X1	07/15/92	0	0	
2900	MXM-W10-X1	07/15/92	50	0	
2901	MXM-W09-X1	07/15/92	17	0	

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Worcester, MA 01605
DEP Certification # MA082
(508) 753-3738

Page 1

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Client:	ABB ENVIRONMENTAL	Contact:	DOUGLAS PIERCE
REVE Account No.:	D1498	Location/PO:	FORT DEVENS/P.N. 06917-05
Date Received:	07/21/92	Matrix:	Water
Method:	Total Coliform	- SM 9222 B	
	Fecal Coliform	- SM 9222 D	

QC Dept: *P. Taylor*
Quality Control Office

Date: 7/23/92

REVE ID	Client ID	Total Coliform		Fecal Coliform	
		Date Sampled	Results org/100 ml	Results org/100 ml	
3040	WWTMW-11	07/21/92	0	0	
3041	WWTMW-12	07/21/92	0	0	
3042	WWTMW-1A	07/21/92	0	0	

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Client: ABB ENVIRONMENTAL Contact: DOUGLAS PIERCE
REVET Account No.: D1491 Location/PO: FORT DEVENS/P.N. 06917-04
Date Received: 07/20/92 Matrix: Water
Method: Total Coliform - SM 9222 B
Fecal Coliform - SM 9222 D

QC Dept: Hand Sample for
Quality Control Office

Date: 7/21/92

REVET ID	Client ID	Date Sampled	Total Coliform	Fecal Coliform
			Results org/100 ml	Results org/100 ml
2974	MDN-W14-X1	07/20/92	0	0
2975	MDN-W13-X1	07/20/92	0	0
2976	MDN-W13-X1	07/20/92	0	0

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Client: ABB ENVIRONMENTAL Contact: DOUGLAS PIERCE
REVET Account No.: D1397 Location/PO: FORT DEVENS/P.N. 06917-05
Date Received: 06/17/92 Matrix: Water
Method: Total Coliform -SM 9222 B
Fecal Coliform -SM 9222 D

QC Dept: *Hand Carried for*
Quality Control Office

Date: *6/23/92*

REVET ID	Client ID	Date Sampled	Total Coliform Results org/100 ml	Fecal Coliform Results org/100 ml
2548	WXG-501-XX	06/17/92	1050	30
2549	WXG-503-XX	06/17/92	500	86
2550	WXG-504-XX	06/17/92	500	100

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Client: ABB ENVIRONMENTAL Contact: DOUGLAS PIERCE
REVE Account No.: D1406 Location/PO: FORT DEVENS/P.N. 06917-05
Date Received: 06/18/92 Matrix: Water
Method: Total Coliform -SM 9222 B
Fecal Coliform -SM 9222 D

QC Dept:

Daniel Torpi for
Quality Control Office

Date:

6/23/92

REVET ID	Client ID	Date Sampled	Total Coliform Results org/100 ml	Fecal Coliform Results org/100 ml
2587	WXG-507-XX	06/18/92	2350	54
2588	WXG-506-XX	06/18/92	1100	55
2589	WDG-507-XX	06/18/92	2050	66
2590	WXG-502-XX	06/18/92	350	105
2591	WXG-505-XX	06/18/92	200	12

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Client: ABB ENVIRONMENTAL
REVET Account No.: D1411
Date Received: 06/22/92
Matrix: Water

Contact: DOUGLAS PIERCE
Location / PO: FORT DEVENS/P.N. 06917-0

QC Dept:

David R. Rupp for

Date:

6/25/92

REVET ID	2617	2618	2619		
Client ID	WXG-508-XX	WXG-510-XX	WXG-601-XX	Units	Method
Date Sampled	06/22/92	06/22/92	06/22/92		
Total Coliform	2250	200	4050	org/100 ml	SM 9222 B
Fecal Coliform	145	5	118	org/100 ml	SM 9222 D

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Client: ABB ENVIRONMENTAL
REVET Account No.: D1422
Date Received: 06/24/92
Matrix: Water

Contact: DOUGLAS PIERCE
Location / PO: P.N. 06917-0

QC Dept:

David R. Rupp for

Date:

6/26/92

REVET ID	2725	2726		
Client ID	WXG-602-XX	WXG-509-XX		
Date Sampled	06/24/92	06/24/92	Units	Method
Total Coliform	1150	2500	org/100 ml	SM 9222 B
Fecal Coliform	70	400	org/100 ml	SM 9222 D

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Client: ABB ENVIRONMENTAL
 REVET Account No.: D1409
 Date Received: 06/19/92
 Method: Total Coliform -SM 9222 B
 Fecal Coliform -SM 9222 D
 Contact: DOUGLAS PIERCE
 Location/PO: FORT DEVENS/PN.N 06917-05
 Matrix: Water

QC Dept: David Tupper
 Quality Control Office

Date: 6/23/92

REVET ID	Client ID	Total Coliform		Fecal Coliform	
		Date Sampled	Results org/100 ml	Date	Results org/100 ml
2607	WXG-604-XX	06/19/92	350		4
2608	WXG-603-XX	06/19/92	450		3

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Client: ABB ENVIRONMENTAL Contact: D. PIERCE
REVET Account No.: D1394 Location/PO: FORT DEVENS/06917-05
Date Received: 06/16/92 Matrix: Water
Method: Total Coliform -SM 9222B
Fecal Coliform -SM 9222D

QC Dept: V. J. [Signature]
Quality Control Office

Date: 6/17/92

REVET ID	Client ID	Date Sampled	Total Coliform Results org/100 ml	Fecal Coliform Results org/100 ml
2540	WX0902XX	06/16/92	TNTC	31
2541	WX0903XX	06/16/92	TNTC	53
2542	WX0901XX	06/16/92	TNTC	26

Notes: TNTC = Too Numerous To Count.

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Client: ABB ENVIRONMENTAL

Contact: DOUGLAS PIERCE

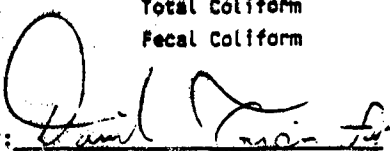
REVET Account No.: D1766

Location/PO: FORT DEVENS/P.N. 06917-04

Date Received: 10/20/92

Matrix: Water

Method: Total Coliform - SM 9222 B
Fecal Coliform - SM 9222 D

QC Dept: 
Quality Control Officer

Date: 11/2/92

REVET ID	Client ID	Date Sampled	Total Coliform Results org/100 ml	Fecal Coliform Results org/100 ml
4584	GSM-92-03B	10/20/92	0	0
4585	GSM-92-02X	10/20/92	0	0
4597	GSM-92-01X	10/21/92	0	0
4598	WWT-MW8	10/21/92	1	0
4599	WWT-MW1	10/21/92	40	0
4600	WWT-MW9	10/21/92	0	0
4611	WWTM10	10/22/92	0	0
4612	WWTM13	10/22/92	10	0
4613	WWTM2A	10/22/92	1	0
4614	WWTM4	10/22/92	0	0
4789	WWTM6	10/23/92	15	0
4790	WWTM5	10/23/92	0	0
4815	WWTM13	10/24/92	0	0
4816	WWTM14	10/25/92	0	0
4846	WWTM-11	10/27/92	3	0
4847	WWTM-12	10/27/92	4	0
4848	WWTM-01A	10/27/92	1	0
4852	WWTM-02	10/28/92	0	0
4853	WWTM-07	10/28/92	0	0

Notes: * = Date analyzed is the same as date sampled.

Subcontracted to Thorstensen Laboratory, Inc.

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